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# Fifteenth Annual Report

*of the*

University of Illinois  
Health Service

*1930-31*

UNIVERSITY OF ILLINOIS



FIFTEENTH ANNUAL REPORT OF HEALTH SERVICE

UNIVERSITY OF ILLINOIS

1930 - 1931

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FIFTEENTH ANNUAL REPORT OF THE HEALTH SERVICE

UNIVERSITY OF ILLINOIS

1930 - 1931

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Urbana, Illinois

To the President of the University:

I have the honor to submit, herewith, the following report of the activities of the Health Service for the academic year 1930-1931.

There was a total of 58,455 visits to the Health Service Station during the year. Of these, 57,105 were student visits. The number of visits per student registered in the University, exclusive of visits from July 1 through September 23, which is 899, and those for the required physical examination, is 3.84. The above total includes 4,772 calls as a result of the required physical examinations on entrance to the University and 4,412 for re-examination.

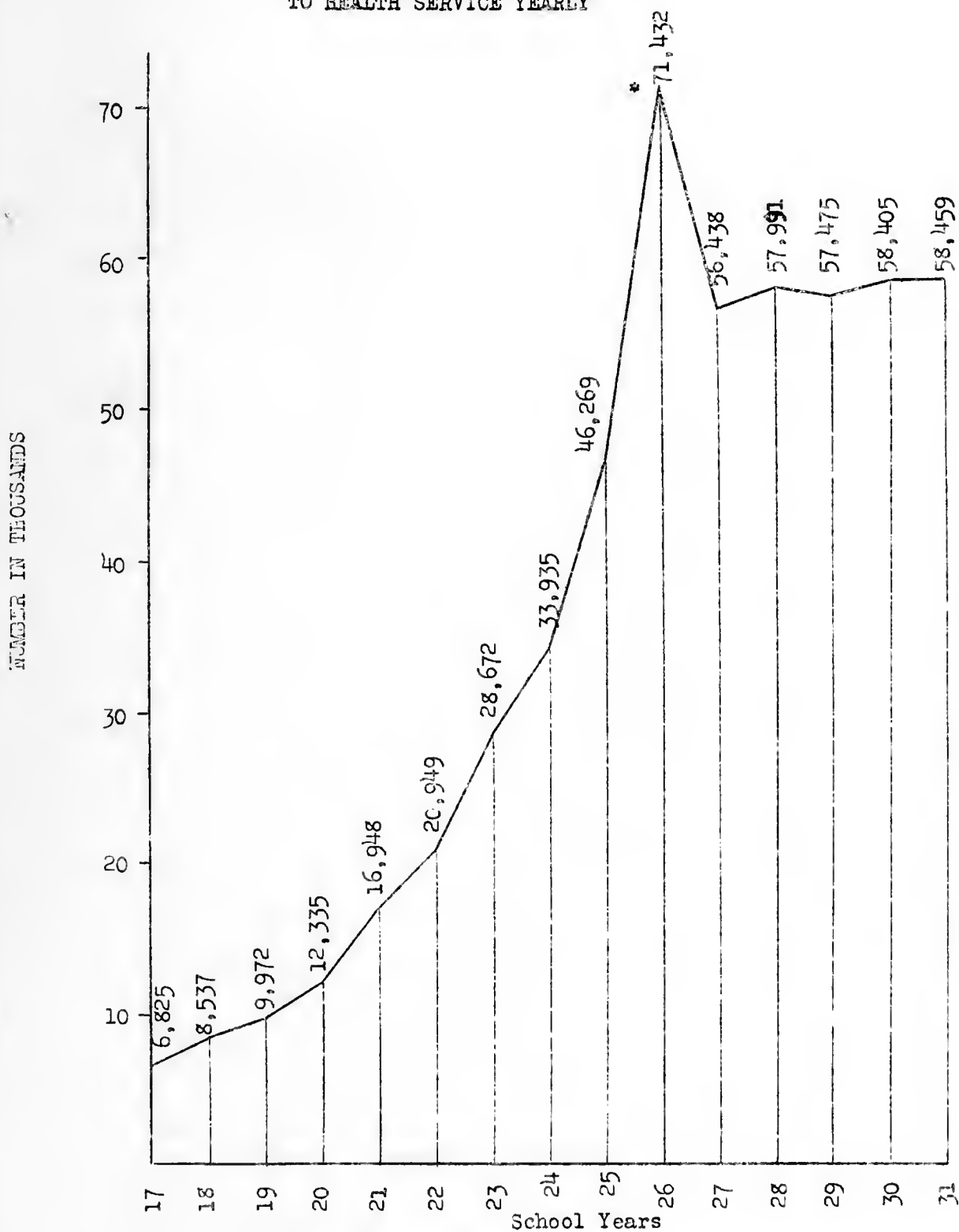
Of the members of the Class of 1934, 92.99 per cent of the men and 90.09 per cent of the women have called one or more times for conference and advice. The men of the class called 16,682 times, an average of 5.34 per man, the women 7,147 times, or an average of 5.44 times. The average for the class was 5.37 visits per student.

The incidence of communicable disease in the student body has been higher than last year. There were 32 cases of scarlet fever, 24 of measles, 17 of mumps, 10 of chickenpox, 4 of rubella, 3 of typhoid fever, 1 of diphtheria, and 1 of undulant fever. Last year there were 10 cases of scarlet fever, 2 cases of mumps, and 2 of smallpox.

A total of 719 students were exposed to communicable disease during the year. Of this number, 445 were allowed to attend classes, but were kept under observation, as permitted by the State Department of



GRAPH SHOWING TOTAL VISITS  
TO HEALTH SERVICE YEARLY



\*Increase due mainly to smallpox epidemic



Health. Certificates were filed with the Health Service by 74 students during the year, certifying their immunity to infectious diseases. Of this number, 15 had had smallpox, 18 had been vaccinated against smallpox, and 41 had had scarlet fever. In accordance with a recent ruling of the State Department of Public Health, 134 students who were exposed to scarlet fever were given Dick tests by local physicians. Of this number, 36 showed positive Dick tests and were quarantined for one week as required by law. The remaining 98 showed negative tests and were permitted to attend classes, which, as students showing negative tests return to classes approximately five school-days earlier than those showing positive tests, resulted in a saving of 490 school-days.

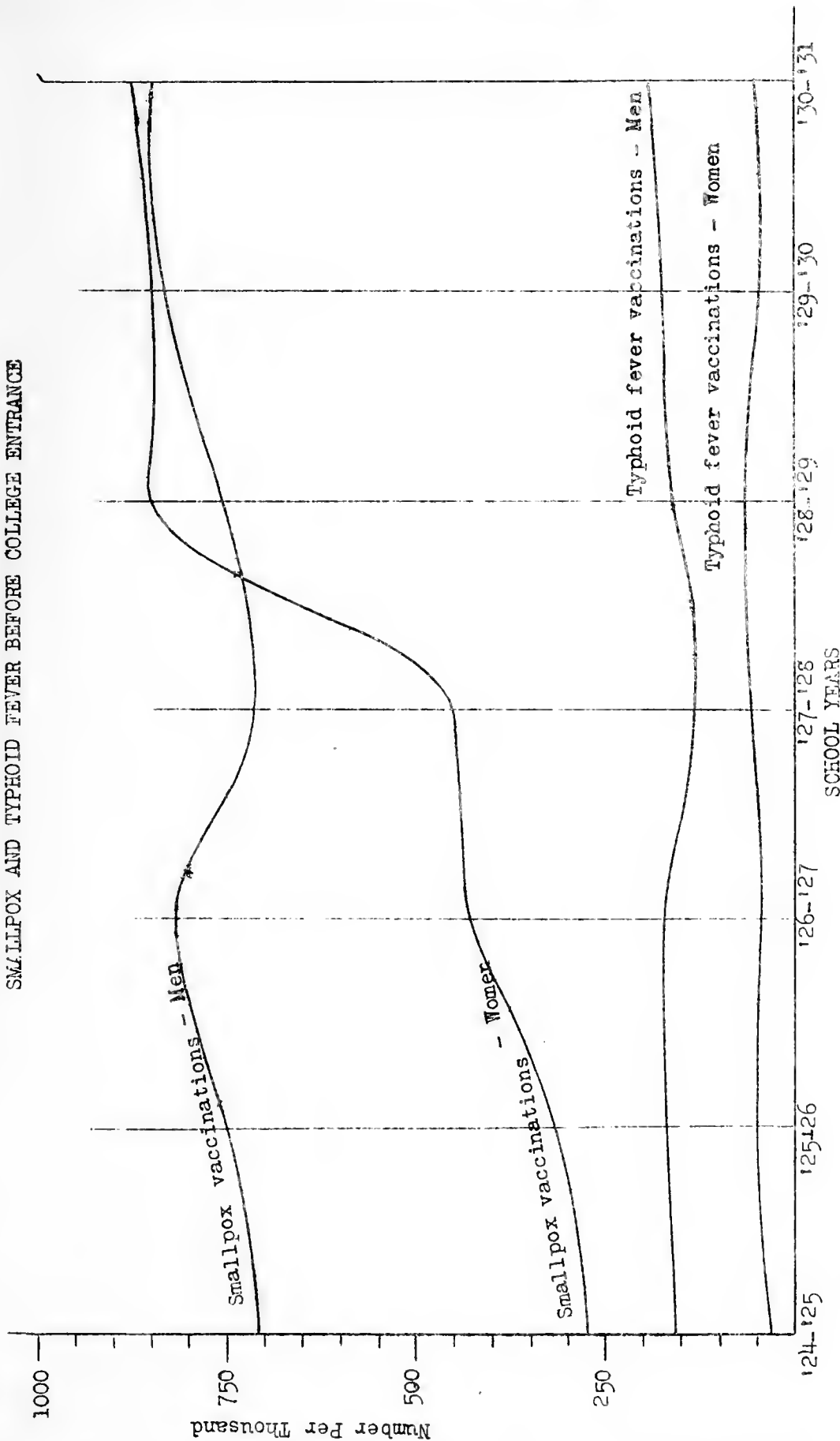
Of the Class of 1934, 15.2 per cent of the men and 13.9 per cent of the women were unvaccinated. Sustained efforts have been made to reduce the number of students susceptible to smallpox by urging them to be immunized. Whenever it was learned through weekly reports from the State Department of Health that students were returning home to communities where smallpox was prevalent, they were notified of its existence and advised to be vaccinated. Where they have come back to the University after vacation in localities where smallpox was present, those who were not successfully vaccinated have been interviewed to determine, if possible, whether or not they had been exposed and have been urged to be vaccinated. These methods have resulted in a total of 1324 vaccinations of students by their family physicians, local doctors, and members of the Health Service Staff.

There were seven cases of communicable disease reported in the families of employees during the year: four cases of measles, and one each



# NUMBER PER THOUSAND VACCINATED FOR

## SMALLPOX AND TYPHOID FEVER BEFORE COLLEGE ENTRANCE





of scarlet fever, mumps, and diphtheria.

The McKinley Hospital cared for 2057 students for a total of 7559 days, an average of 3.67 days per patient. There was an increase of 24.78 per cent in the total number hospitalized over last year. The other Twin City hospitals admitted 370 students for a total of 1827 days, an average of 4.9 days per patient. The difference in the average stay in days between McKinley and other local hospitals is due to the fact that McKinley Hospital does not as yet admit patients known to require surgical treatment. During the year Health Service physicians sent a total of 606 students to the hospitals; while in the hospital, these were cared for by 46 local physicians, an average of approximately 13.2 student patients apiece.

Employees of the University handling food products, students employed as food-handlers by the University, and those enrolled in dairy manufacturing courses, meat courses, and the course in lunch room management were examined to determine whether or not they had communicable disease or were disease carriers. One student was found to be a typhoid carrier and was excluded from handling food. He was required by the State Department of Health to sign an agreement not to handle food, drinks, or milk products to be used for human consumption. He is being kept under continuous observation by the State Department. Food-handlers who had not been successfully vaccinated within the last five years for smallpox were re-vaccinated. Specimens of blood were taken for Widal tests and they were immunized against typhoid fever if they had not been inoculated with the last three years.

A total of 67 faculty members and employees who are drivers



of automobiles for the University were examined as to acuity of vision, color blindness, nervous reaction, and hearing. Of those examined, nine were referred to oculists to have glasses fitted in order to have their vision for distance improved. Because of marked defects of vision, it was recommended that eleven not be permitted to drive automobiles without wearing glasses; none of those examined were so near-sighted as to be below the minimum vision recommended by the Committee on Physical Standards for Drivers of Motor Vehicles of the Section on Ophthalmology of the American Medical Association. None were color-blind and none were found to be in such physical condition as would prevent their assuming the responsibility of a chauffeur.

The physical condition of 580 men engaging in athletics was rechecked. There were 932 students, as compared with 923 last year, who were re-examined to determine their physical condition to take military and regular gymnastics. Of these, 524 were assigned to individual gymnastics for special physical training, 16 were permanently excused from military because of failure to meet the minimum requirements of the War Department, and nine were not permitted to take either physical education or military because of the risk of exercise to individuals with such marked physical abnormalities and organic disease. A total of 91 temporary excuses were recommended because the student had undergone recent operations, was convalescing, or had lost too much time on account of illness to complete the work for the semester. There were 28 students below the minimum physical requirements for commission who desired to take military and whose condition did not make it unsafe to do so. A total of 142 students were assigned to military whose physical condition

1. The first step is to identify the problem.

2. The second step is to define the problem.

3. The third step is to analyze the problem.

4. The fourth step is to plan the solution.

5. The fifth step is to implement the solution.

6. The sixth step is to evaluate the solution.

7. The seventh step is to monitor the solution.

8. The eighth step is to maintain the solution.

9. The ninth step is to improve the solution.

10. The tenth step is to document the solution.

11. The eleventh step is to communicate the solution.

12. The twelfth step is to review the solution.

13. The thirteenth step is to update the solution.

14. The fourteenth step is to archive the solution.

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16. The sixteenth step is to restore the solution.

17. The seventeenth step is to backup the solution.

18. The eighteenth step is to recover the solution.

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20. The twentieth step is to clone the solution.

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22. The twenty-second step is to split the solution.

23. The twenty-third step is to move the solution.

24. The twenty-fourth step is to copy the solution.

25. The twenty-fifth step is to paste the solution.

26. The twenty-sixth step is to print the solution.

was classed as borderline, that is, possibly ineligible for commission.

During the year, 3446 prescriptions were issued to students whose physical condition required temporary modification or change in their physical training. By this procedure, students who developed sinusitis, ringworm of the feet, boils, or had undergone operations were able to receive exercise without injury to themselves or without becoming a source of infection to their associates.

As in the past, students unvaccinated against smallpox have been urged to undergo vaccination. A total of 1316 students were vaccinated during the year. There were 2451 typhoid inoculations administered during the same period, representing 817 complete immunizations. This total includes those coming under the regulation of the University for food-handlers and those who were going to the R. O. T. C. camps.

The cooperation of the local doctors and other physicians of the State attending students has been most generous and helpful. During the year, 601 letters have been received from them concerning the physical condition of their former patients and they have sent 74 certificates to the Health Service Station certifying the immunity of students to smallpox or scarlet fever.

The Health Service has continued its policy of inspecting, upon request, insanitary conditions of the university grounds, in student living quarters, and in boarding clubs. Landladies in general have been cooperative and have made prompt efforts to correct unsatisfactory features when called to their attention.

The Health Service has continued its policy of going over the medical histories and physical examinations of all men students placed on



probation. Wherever there was found to be any notation which might suggest a possible physical handicap as a predisposing factor to poor scholarship, the student has been seen for a conference and a re-examination made if indicated. To this end, 2985 medical records were rechecked and studied. In a few instances uncorrected defects were discovered which were undoubtedly contributory to the students' unsatisfactory class standing. At least 95 per cent of the medical records would indicate that poor scholastic standing must be attributed to causes other than ill health.

In "following up" students who were found to have defects at the time of their examination on matriculation, in addition to the usual re-examination and conference, 228 students with albuminuria have had repeated urinalyses to determine whether their condition was functional or pathological. Maximum protection has been given 131 students with heart lesions by keeping them under observation and by repeated re-examinations during the academic year. A group of 53 students with physical signs suggestive of possible incipient tuberculosis have been seen many times during the year. Under a proper diet, a hygienic regime and graduated activity, most of them have increased in weight and vigor and have been released from observation. There proved to be five active cases of tuberculosis and three cases which were questionable and are still being seen.

Sustained effort has been made throughout the year to improve the mental health of students who have given a history of being subject to "blues" or worry, or who have found difficulty in becoming adjusted to their environment. To this end, 204 students were interviewed one or more times. With rare exceptions, their conditions were remediable and readily yielded to suggestion, friendly interest, encouragement, medical

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862. It is a very important document, as it contains the President's views on the state of the Union and the progress of the war.

2. The second part of the document is a report from the Secretary of the Treasury, dated January 10, 1862. It contains a detailed account of the financial state of the country and the measures taken to meet the needs of the war.

3. The third part of the document is a report from the Secretary of the Interior, dated January 15, 1862. It contains a detailed account of the state of the public lands and the measures taken to manage them.

4. The fourth part of the document is a report from the Secretary of the Navy, dated January 20, 1862. It contains a detailed account of the state of the navy and the measures taken to strengthen it.

5. The fifth part of the document is a report from the Secretary of the War, dated January 25, 1862. It contains a detailed account of the state of the army and the measures taken to equip and train it.

6. The sixth part of the document is a report from the Secretary of the State, dated January 30, 1862. It contains a detailed account of the state of the foreign relations of the United States and the measures taken to manage them.

7. The seventh part of the document is a report from the Secretary of the War, dated February 5, 1862. It contains a detailed account of the state of the army and the measures taken to equip and train it.

8. The eighth part of the document is a report from the Secretary of the Navy, dated February 10, 1862. It contains a detailed account of the state of the navy and the measures taken to strengthen it.

9. The ninth part of the document is a report from the Secretary of the Interior, dated February 15, 1862. It contains a detailed account of the state of the public lands and the measures taken to manage them.

10. The tenth part of the document is a report from the Secretary of the Treasury, dated February 20, 1862. It contains a detailed account of the financial state of the country and the measures taken to meet the needs of the war.

11. The eleventh part of the document is a report from the Secretary of the State, dated February 25, 1862. It contains a detailed account of the state of the foreign relations of the United States and the measures taken to manage them.

12. The twelfth part of the document is a report from the Secretary of the War, dated March 1, 1862. It contains a detailed account of the state of the army and the measures taken to equip and train it.

13. The thirteenth part of the document is a report from the Secretary of the Navy, dated March 5, 1862. It contains a detailed account of the state of the navy and the measures taken to strengthen it.

14. The fourteenth part of the document is a report from the Secretary of the Interior, dated March 10, 1862. It contains a detailed account of the state of the public lands and the measures taken to manage them.

15. The fifteenth part of the document is a report from the Secretary of the Treasury, dated March 15, 1862. It contains a detailed account of the financial state of the country and the measures taken to meet the needs of the war.

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19. The nineteenth part of the document is a report from the Secretary of the Interior, dated April 5, 1862. It contains a detailed account of the state of the public lands and the measures taken to manage them.

20. The twentieth part of the document is a report from the Secretary of the Treasury, dated April 10, 1862. It contains a detailed account of the financial state of the country and the measures taken to meet the needs of the war.

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24. The twenty-fourth part of the document is a report from the Secretary of the Interior, dated May 1, 1862. It contains a detailed account of the state of the public lands and the measures taken to manage them.

25. The twenty-fifth part of the document is a report from the Secretary of the Treasury, dated May 5, 1862. It contains a detailed account of the financial state of the country and the measures taken to meet the needs of the war.

26. The twenty-sixth part of the document is a report from the Secretary of the State, dated May 10, 1862. It contains a detailed account of the state of the foreign relations of the United States and the measures taken to manage them.

27. The twenty-seventh part of the document is a report from the Secretary of the War, dated May 15, 1862. It contains a detailed account of the state of the army and the measures taken to equip and train it.

28. The twenty-eighth part of the document is a report from the Secretary of the Navy, dated May 20, 1862. It contains a detailed account of the state of the navy and the measures taken to strengthen it.

29. The twenty-ninth part of the document is a report from the Secretary of the Interior, dated May 25, 1862. It contains a detailed account of the state of the public lands and the measures taken to manage them.

30. The thirtieth part of the document is a report from the Secretary of the Treasury, dated June 1, 1862. It contains a detailed account of the financial state of the country and the measures taken to meet the needs of the war.

treatment, readjustment of their schedules of living, or assistance from the proper social, economic, educational, or religious organizations about the Campus.

This year, Dr. V. A. Ross has made a further careful study of this group of students by comparison of their scholastic records, intelligence ratings, and health records with those of their apparently normal classmates. While very interesting avenues for further detailed investigation have been revealed, the number of individuals considered and the differences between normals and the "worried" and "blue" are too small to warrant sweeping conclusions. (Set out in full in Appendix I)

Definite symptoms of psychoneurosis were shown by five students during the year. One was withdrawn from the University, and placed under the care of a psychiatrist. Of the remaining four, all continued in school throughout the year, three fulfilled the scholastic requirements, and one went on probation.

During the year, 18 students requested the use of an automobile to attend classes because of physical disability. Of these 10 were found to have physical defects sufficiently severe to make the use of a car necessary to get to classes. These 10 car permits were recommended on account of the following physical conditions: five for atrophy of one or both legs due to poliomyelitis, and one each for spinal injury, organic heart disease, pelvic injury, severe flat feet, and convalescence from tuberculosis.

Civil Service employees made 1304 calls at the Health Service Station during the year, of which 150 were for physical examination upon beginning employment. There have been 180 accidents to University employees



while at work. A total of 123 required minor surgical attention as the result of injury; 57 were so severely injured that they were referred to outside surgeons, specialists, or radiologists. Of these, two were compelled to remain in the hospital for an average of six days each and one was left with a slight permanent disability which will not severely handicap him in earning a livelihood.

The swimming pools of the University have been maintained in a good sanitary condition throughout the year. With the able assistance of the staff of the State Water Survey, that of the Office of the Supervising Architect, and that of the Departments of Physical Education, the bathers have been required to observe rigidly the sanitary regulations for swimmers, daily bacteriological tests have been made, the chlorine content of the water has been determined twice a day, the load of the pool has been controlled, and every effort has been made to care for the pools in accordance with the Standards of the American Public Health Association and Conference of State Sanitary Engineers.

Colon bacilli were found in three of the samples of water which were taken daily from the pools during the year. There have been thirty-one high counts of bacteria other than bacillus coli. These occurrences, on investigation, were found to be due, in most instances, to some temporary mechanical difficulty or to overload at the time of life-saving practice in street clothes.



## STUDENT PHYSICAL EXAMINATIONS

A total of 4772 students were given complete physical examinations during the year as compared with 4696 for the preceding year, an increase of 76. Of this number, 3312 were men and 1460 were women. Examinations of prospective students who did not matriculate totaled 333, or .68 of one per cent of the total physical examinations. This entailed a seemingly unnecessary cost of \$98.39, but there is no way to avoid the expense of examining these individuals.

If the total cost of the physical examinations is estimated as the increment in excess of the expense of the operation of the Health Service as a department of instruction, advice, disease prevention, and medical supervision of Civil Service employees, the per capita cost for the medical examination for men is 34.8 cents, for the women 22.9 cents.

Of the students examined, 1999 men and 695 women were recalled for re-examination and were advised to consult their family physicians, specialists, or dentists. The detailed statistical data from the medical records of the members of the class of 1934 will be found in Tables I, II, and III of the Appendix.

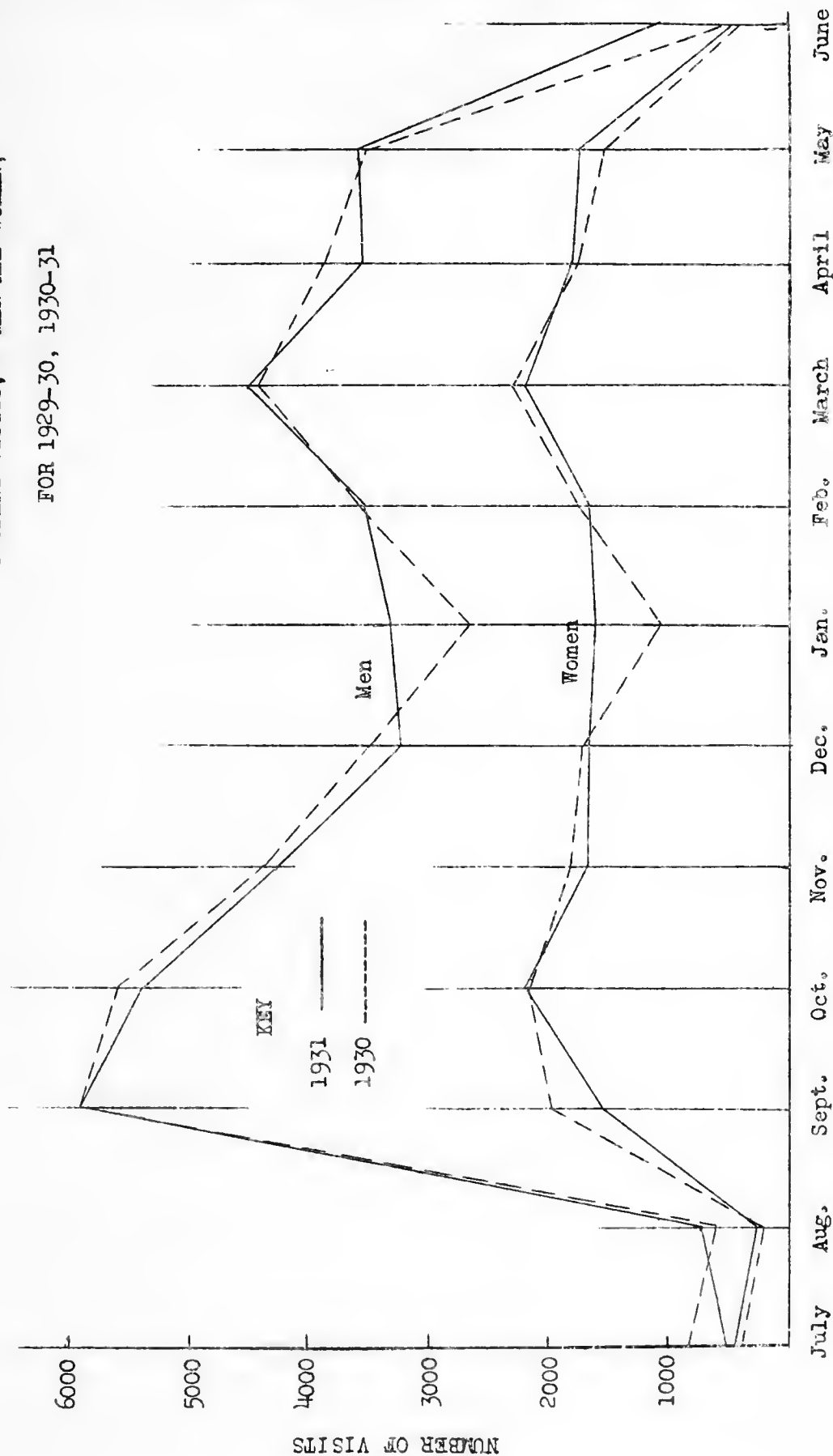
Table I

## TYPES OF MEDICAL ATTENTION TO STUDENTS AND EMPLOYEES

	1929-30	1930-31
Advice in case of illness	8942	8606
First aid in injury and infection	7840	6868
Sent to hospital	763	764
Referred to specialists	2117	3311
Excuses recommended, women	5392	5261
men	7390	3834
Urinalyses	6276	5941
Complete physical examinations of students and employees (Sept. and Feb.)	4881	4922



MONTHLY DISTRIBUTION  
OF  
STUDENT VISITS, - MEN AND WOMEN,  
FOR 1929-30, 1930-31



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## VISITS

For the year, the total of visits by men students was 39,698, an increase of 176 over last year's figure of 39,522. The total for the women students was 17,407, an increase of 89 over last year's figure of 17,318. There was a decrease in visits by Civil Service men, the figure of 1209 being less by 279 than the figure of 1488 for the preceding year. Visits by Civil Service women totaled 95 as against 77 for the year before, an increase of 18. The general increase in visits has been offset during the past year by the marked decrease in visits by Civil Service men, leaving a net increase of five for the past year over the year preceding.

Table II

## MONTHLY DISTRIBUTION OF VISITS

	<u>Student</u>		<u>Civil Service</u>		<u>Total</u>
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	
July	497	454	121	10	1082
August	730	251	111		1092
September	5931	1550	101	6	7588*
October	5394	2211	81	7	7693
November	4258	1687	60	9	6014
December	3227	1676	55	14	4972
January	3313	1632	74	4	5023
February	3545	1668	100	8	5321
March	4532	2224	94	6	6856
April	3566	1805	113	12	5496
May	3615	1757	141	11	5524
June	1090	492	158	8	1748
Total	39,698	17,407	1209	95	58,409

\*Includes physical examinations on registration



## CIVIL SERVICE EMPLOYEES

Table III

## RESULTS OF PHYSICAL EXAMINATIONS OF EMPLOYEES

Total number examined	150
Grade given:	
Excellent	0
Good	120
Fair	29
Poor	1

There were 150 physical examinations given to Civil Service employees of the University. Of them, 147 were men and 3 were women. Their physical classification is given above. Detailed results of the examinations will be found in Table IV of the Appendix.

The visits of the Civil Service employees totaled 1304. Of these, the men made 1209 and the women 95 visits. Because of the severity of their accidents, the need of x-ray examination, or the necessity for the services of a specialist, it was found necessary during the year to refer 57 injured employees to outside physicians. The status of those injured was as follows:

Civil Service employees	
Men	39
Women	0
Temporary	12
Student employees	3
Research assistants	3
Faculty members (hurt while at work)	0
Total	57

Employees filing accident reports were as follows:

Permanent	114
Temporary	53
Students	9
Research assistants	4
Total	180



## THE TREND IN INJURIES TO EMPLOYEES

Accidents among Civil Service employees are becoming more frequent, the biennium 1929-31 showing an increase of 80 per cent over the preceding biennium. The number of accidents for the past two years has exceeded the total for the three years next preceding.

During the last two years eye injuries due to the presence of foreign bodies have increased by 300 per cent. This type of accident, with the expense incidental thereto, might be avoided in most cases by the use of goggles.

## CLASSIFICATION OF INJURIES OF CIVIL SERVICE EMPLOYEES FOR FIVE YEARS

	1926-27	1927-28	1928-29	1929-30	1930-31
Heat stroke					1
Sprain and Strain	5	13	13	24	19
Laceration, Incision					
Abrasion, and					
Punctured Wound	50	46	32	75	68
Contusion	18	29	17	44	42
Dog Bite			2	1	1
Fracture, Wrist			1	1	1
Rib			3		1
Heel				1	
Nose					1
Skull			1	1	
Other	2	3			
Infection	8	8	2	6	2
Sliver		3	2	9	4
Burn, acid			2	5	1
acid-eye			1	2	
other	5	8	3	13	5
Eye injury			1	3	2
Eye flashed			1	1	
Foreign body in eye	11	12	8	27	32
Bronchial irritation					
from gas				1	2
Rabies virus on face					
and eye				2	
Superinduced hernia			1		
Nose bleed			1		
Not classified	11				
Total	110	122	91	216	182



### MEDICAL SUPERVISION OF FOOD HANDLERS

During the year, the carrier status of all University employees who come in contact with food in University Departments was carefully determined. Those who had not been immunized for typhoid fever within three years were re-inoculated and re-vaccinated against smallpox if they had not been vaccinated within five years.

In accordance with the regulations of the Board of Trustees and the requirements of the State Department of Health, the employees of the Dairy Department were checked as to their physical condition, one or more times during the year.

Specimens of blood for Widal tests of all prospective food handlers were taken before immunization. If there was a history of typhoid fever or paratyphoid fever or if the Widal test proved to be positive, three bacteriological examinations of the feces and urine were made; no person suspected of being a typhoid carrier was permitted to become a food handler until three such tests were found to be negative.

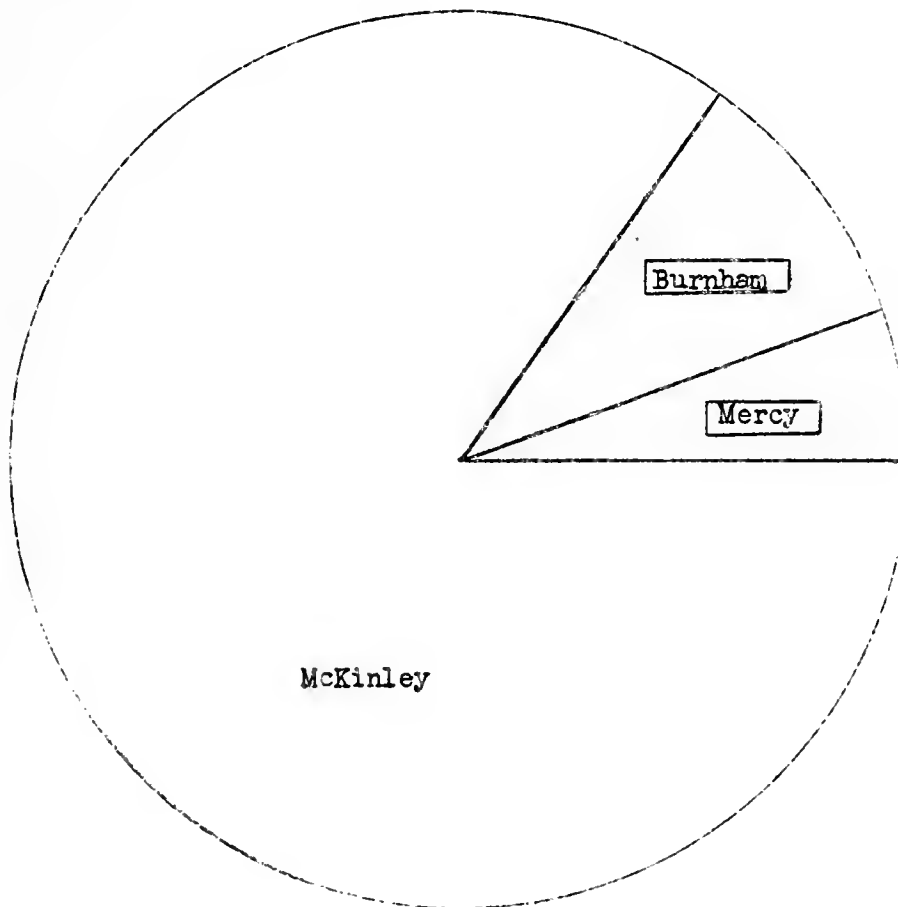
One man who was found to be a carrier of typhoid fever is at present under the supervision of the State Department of Health and is not permitted to handle food or dairy products which are to be used for human consumption.

#### Distribution of Food Handlers

Woman's Residence Hall	51
Dairy Department	76
McKinley Hospital	7
Cafeteria, Woman's Bldg.	35
Davenport House	7
Animal Husbandry	5
	<hr/> 181



DISTRIBUTION OF HOSPITAL CASES DURING  
1930 - 1931



<u>Hospital</u>	<u>Cases</u>	<u>Per Cent</u>	<u>Key</u>
Mercy	137	5.65	<div></div>
Burnham	233	9.60	<div></div>
McKinley	2057	84.75	<div></div>



Laboratory Examinations

Widal tests for typhoid fever		
Negative	381	
Positive	0	
Partial	<u>2</u>	383
Feces - urine for typhoid fever		
Negative	72	
Positive	<u>1</u>	73
Sputum for tuberculosis		
Negative	49	
Positive	<u>2</u>	51
Throat cultures for diphtheria		
Negative for diphtheria	53	
Positive for Vincent's		
Angina	<u>34</u>	87
Wasserman test for syphilis		
Negative	0	
Positive	<u>1</u>	1
Kahn test for syphilis		
Negative	44	
Positive	<u>3</u>	47
Blood examination		2
Agglutination test for undulant fever		
Positive		3
Rabies (dog)		
Negative		1

## HOSPITALS

The McKinley Hospital cared for 2057 patients for a total of 7559 days, an average of 3.67 days per patient as compared with 1566 patients for 5935 days or an average of 3.8 days per patient for last year. The other Twin City hospitals cared for 370 students for a total of 1827

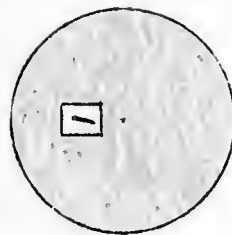


PERCENTAGE DISTRIBUTION OF

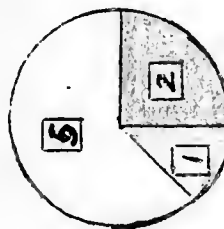
COMMUNICABLE DISEASES

EACH MONTH

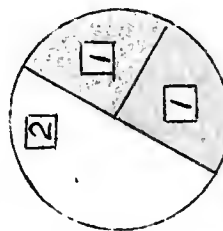
1930-31



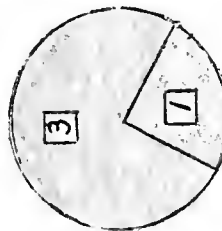
September



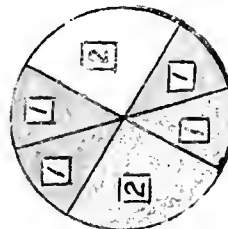
October



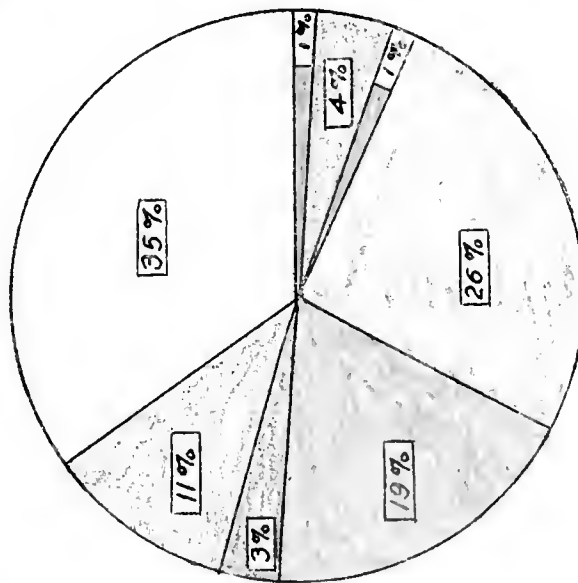
November



December

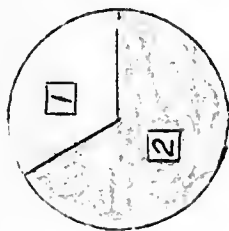


January

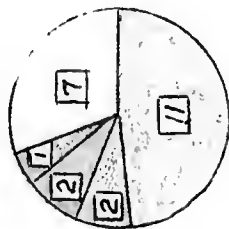


PERCENTAGE OF EACH DISEASE

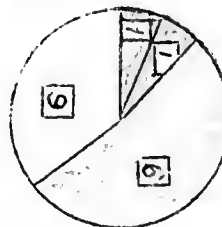
Numerals denote  
Number of Cases



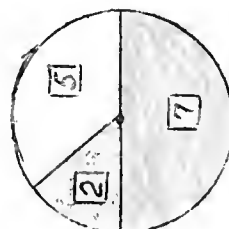
June



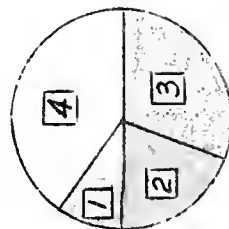
May



April



March



February

- Mumps
- Typhoid fever
- Diphtheria
- Undulant fever

- Scarlat fever
- Measles
- Chickenpox
- Rubella



days, an average of 4.9 days per patient. The greater number of days per patient in the City hospitals is due to the fact that the McKinley Hospital does not yet accept cases expected to require surgical attention.

There was an increase of 24.78 per cent over the number hospitalized last year. The greater number hospitalized during the year was due largely to a slight epidemic of influenza which occurred during January. Of the 11,594 students registered during the year, 17.8 per cent, or one out of 5.6, were hospitalized as compared with 16.6 per cent of the students, or one out of every six, for the year preceding.

Students joining the Hospital Association during the first semester numbered 6,470 or 57.5 per cent of the students registered, the second semester 5,004 or 48.2 per cent.

Table IV shows the McKinley Hospital cases by months for communicable and non-communicable diseases. The peak in most years has been reached during the month of March. The peak this year was reached in January due to a slight influenza epidemic. February and March were also months of relatively high morbidity in the student body.

Table IV  
CASES CARED FOR AT MCKINLEY HOSPITAL  
By months

	<u>Communicable</u>		<u>Non-Communicable</u>		<u>Total</u>	
	<u>Cases</u>	<u>Days</u>	<u>Cases</u>	<u>Days</u>	<u>Cases</u>	<u>Days</u>
September	20	37	48	102	68	139
October	73	244	196	547	269	791
November	49	191	146	474	195	665
December	92	298	90	294	182	592
January	348	1097	100	384	448	1481
February	211	860	77	250	288	1110
March	133	763	136	526	269	1289
April	47	307	89	334	136	641
May	44	271	133	469	177	740
June	7	41	20	70	27	111
TOTAL	1024	4109	1035	3450	2059	7559

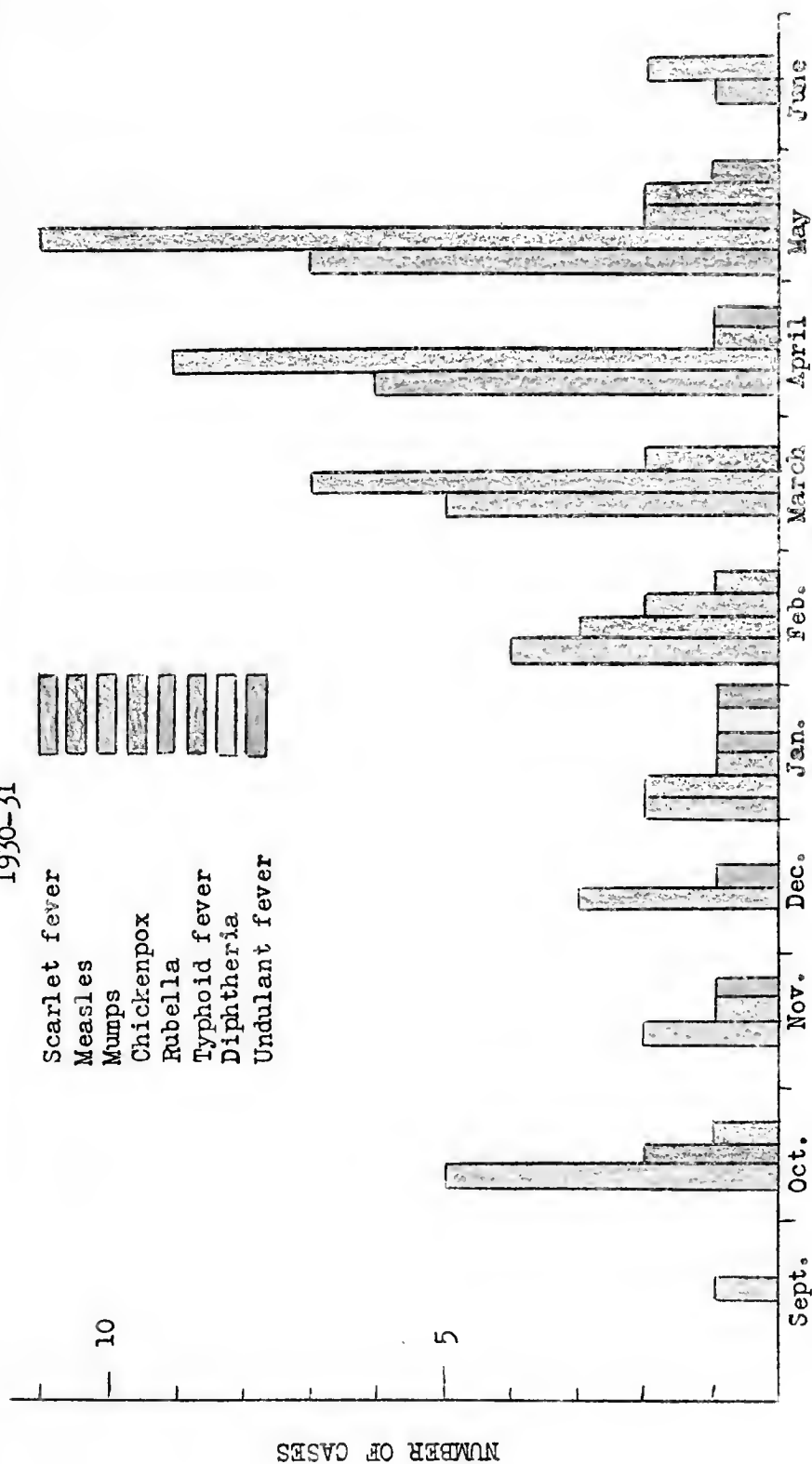


# CHART OF THE OCCURRENCE OF COMMUNICABLE DISEASE

IN THE LODGING HOUSES AND HOMES OF

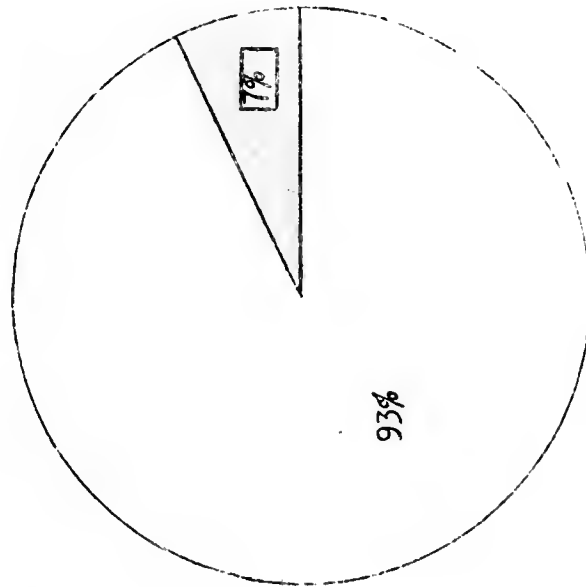
STUDENTS, FACULTY MEMBERS AND CIVIL SERVICE EMPLOYEES

1930-31



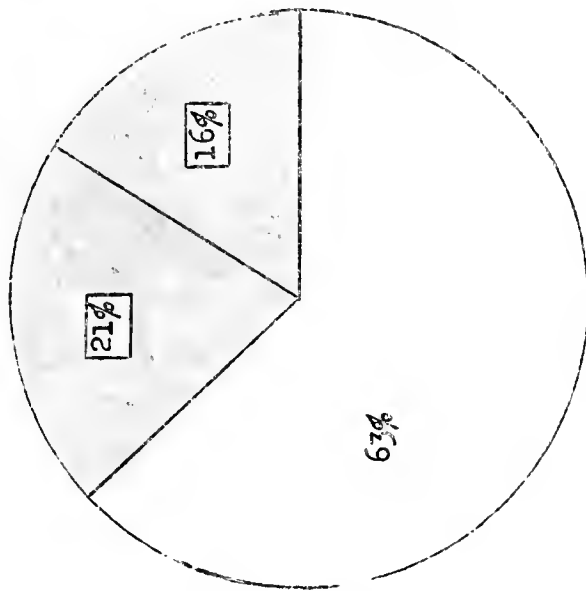
THE UNIVERSITY OF CHICAGO  
LIBRARY  
540 EAST 57TH STREET  
CHICAGO, ILL. 60637

CHART SHOWING  
THE PERCENTAGE OF STUDENTS EXPOSED BY  
STUDENTS AND NON-STUDENTS



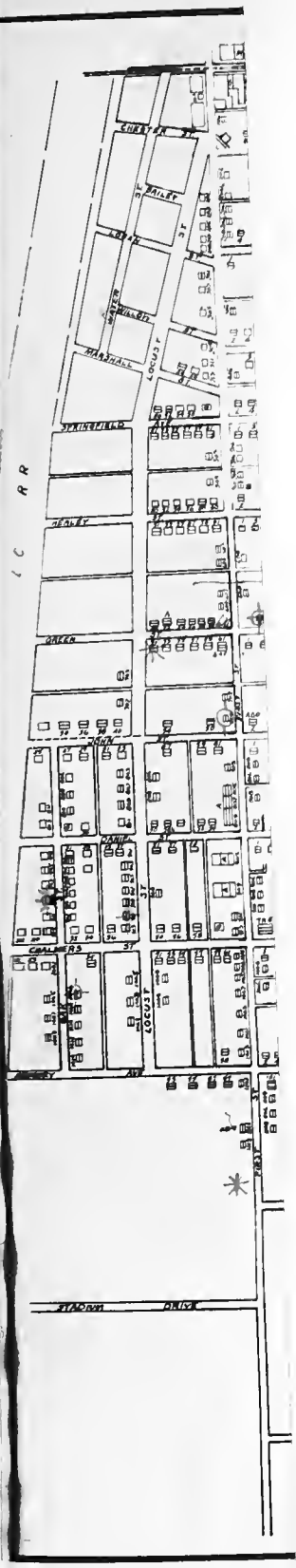
☐ Exposed by Students  
☐ Exposed by Non-Students

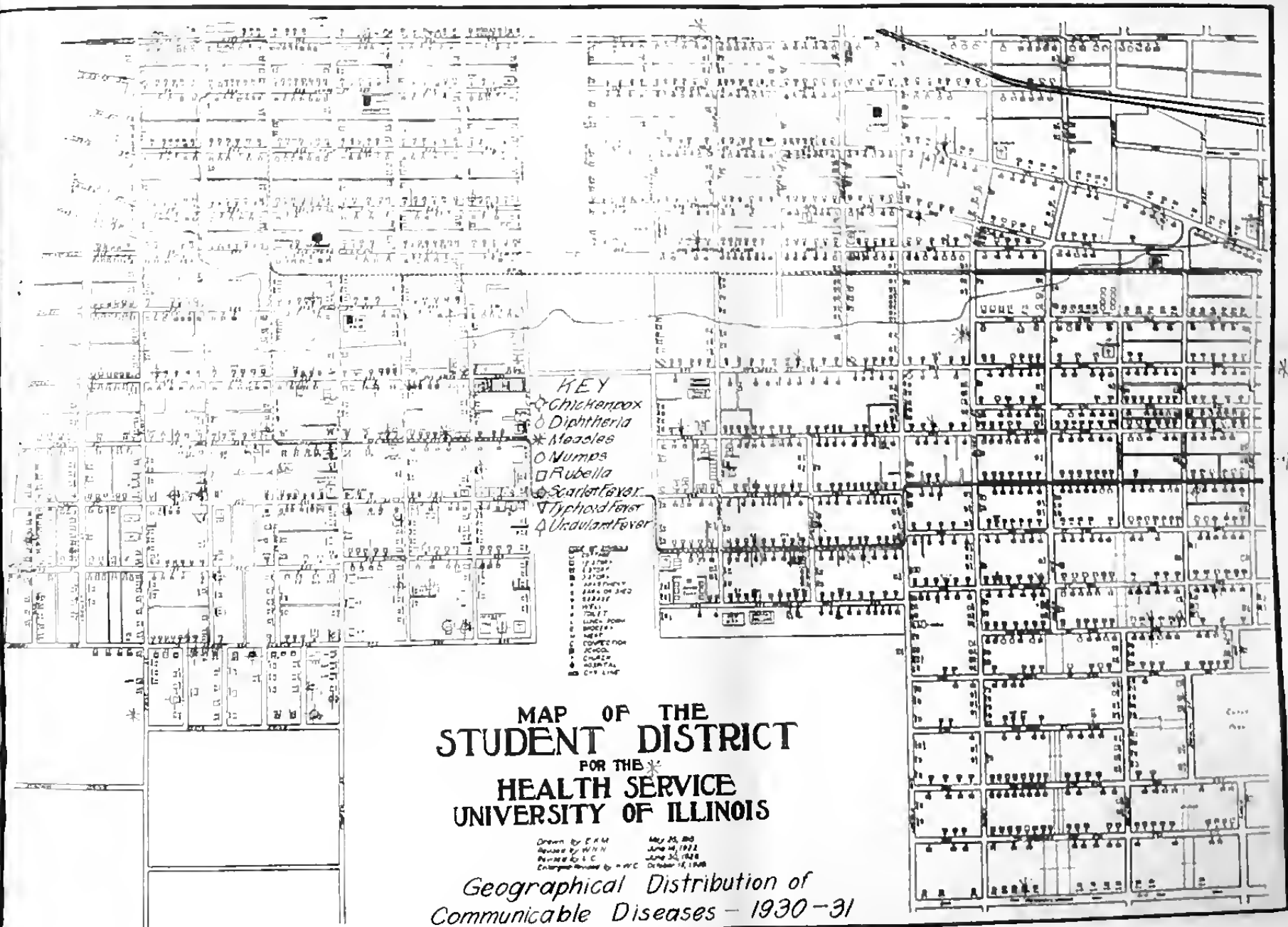
CHART SHOWING  
THE DISTRIBUTION OF COMMUNICABLE DISEASES  
IN THE UNIVERSITY POPULATION



☐ Student Rooming Houses  
☐ Faculty Members Homes  
☐ Civil Service Employees Homes







MAP OF THE  
STUDENT DISTRICT  
FOR THE  
HEALTH SERVICE  
UNIVERSITY OF ILLINOIS

Drawn by E. H. M.  
Revised by W. H. N.  
Published by E. C.  
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May 25, 1930  
June 14, 1931  
June 25, 1932  
October 15, 1933

Geographical Distribution of  
Communicable Diseases - 1930-31

Average Hospital Stay  
Percentage of Students Using Hospitals

Below is a table showing the average stay of student patients in all hospitals for three years, with the percentage of students using the hospital in each year.

<u>Year</u>	<u>Average Hospital Stay</u>	<u>Per cent of students using hospitals</u>
1930-31	3.87	17.8
1929-30	4.01	16.6
1928-29	4.50	18.7

Table V shows the number of cases of communicable diseases cared for at the McKinley Hospital.

Table V

CASES CARED FOR AT MCKINLEY HOSPITAL  
By Disease

	1930-1931		1929-1930		1928-1929	
<u>Disease</u>	<u>Cases</u>	<u>Days</u>	<u>Cases</u>	<u>Days</u>	<u>Cases</u>	<u>Days</u>
Chickenpox	12	126	6	63	9	94
Diphtheria	1	9	1	5	1	8
Influenza	453	1671	46	197	523	2018
Malaria	0	0	1	2	5	17
Measles	9	61	1	7	7	43
Mumps	11	117	8	87	33	286
Pneumonia	3	47	1	13	1	17
Rubella	4	29	1	7	1	7
Scarlet fever	15	396	8	197	32	698
Smallpox	0	0	2	40	2	56
Total	508	2456	74	599	614	3244

A study of the average length of hospital stay in influenza cases for the past eight years reveals no significant trend.

<u>1930-31</u>	<u>1929-30</u>	<u>1928-29</u>	<u>1927-28</u>	<u>1926-27</u>	<u>1925-26</u>	<u>1924-25</u>	<u>1923-24</u>
3.69	4.28	3.86	3.73	3.50	3.89	3.52	3.91



## VENEREAL DISEASE

The incidence of venereal disease in the student body still remains very low. Of the students seen during the year, 28 had neisserrian infection, one chancroid, and one syphilis. This is an incidence of 2.41 per thousand which is very much lower than any of the estimates usually given for the same age group in the general population.

## IMMUNIZATION

The number of students vaccinated against smallpox was 1316 and those inoculated against typhoid fever 817. Those inoculated against typhoid fever consisted largely of food handlers in the employ of the University and of students going to summer R. O. T. C. camps. In May the value of immunization as a safeguard during vacation was brought to the attention of both students and faculty members and they were advised to have themselves inoculated against typhoid fever by their family physicians before going camping or traveling.

## SWIMMING POOLS

Daily tests of the water in the pools of the New Gymnasium, Old Gymnasium, and Woman's Gymnasium were made to determine its sanitary condition for swimming purposes. Precautions were taken to insure that the load of the pools should not exceed the limits of physical and sanitary safety approved by the Joint Committee of the American Public Health Association and the Conference of State Sanitary Engineers.

During the year, the bacterial tests of the water showed presence of *Bacillus coli* upon three occasions. High counts of bacteria were found in 21 samples of water from the Old Gymnasium, three from the New

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Gymnasium, and seven from the Woman's Gymnasium. In most instances a check-up revealed the cause of the high count which was promptly controlled.

#### FIRST AID CABINETS

First aid cabinets in the various buildings on the campus now number 93. Three additional ones were installed during the year on the requisition of the departments expecting to use them. Depending upon their location and frequency of use, these cabinets are maintained by weekly and twice-weekly inspection and replacement of supplies.

#### INSTRUCTION IN HYGIENE

Courses in elementary hygiene for men and for women, and the advanced course for teachers and athletic coaches were taught each semester with enrollments as given below.

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Elementary Hygiene			
First semester	2393	811	3209
Second semester	2026	750	2776
Advanced Hygiene			
First semester	24		24
Second semester	61	1	62
Number of sections			
First semester	54	17	71
Second semester	48	17	65

# THE JOURNAL OF THE

ROYAL ANTHROPOLOGICAL INSTITUTE

1900-1901

1900-1901

1900-1901

1900-1901

1900-1901

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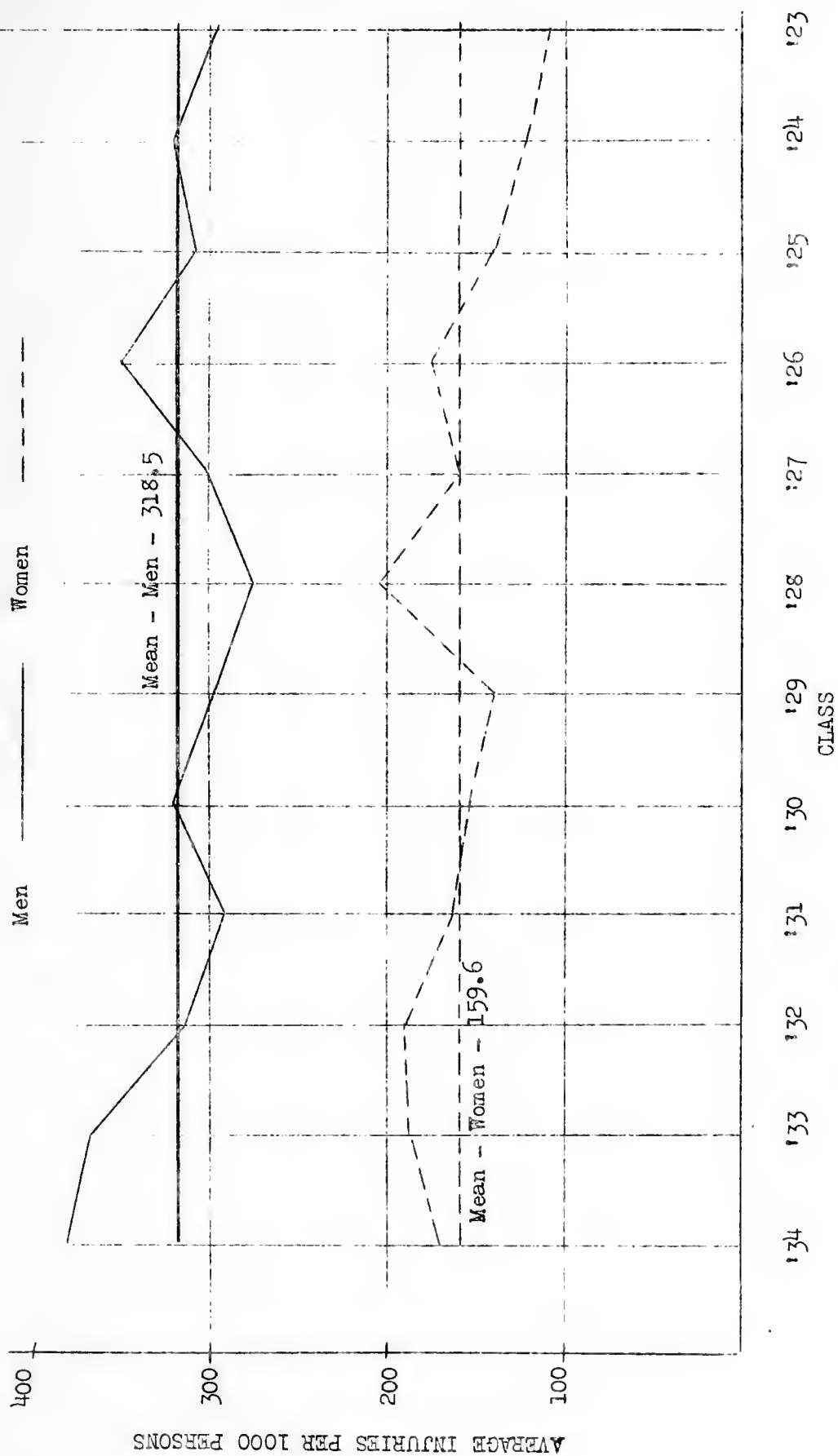
1900-1901

1900-1901

1900-1901

# AVERAGE INJURIES PER 1000 PERSONS

## BEFORE COLLEGE ENTRANCE





COMMENTS UPON THE MEDICAL HISTORY  
AND PHYSICAL EXAMINATION OF THE CLASS OF 1934

Family History of Inheritable Diseases

Table VI

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Tuberculosis	7.27	14.10	269	8.13	193	13.91	462	9.8
Cancer	9.23	13.84	303	9.16	210	15.14	513	10.9
Nervous break- down	5.79	9.01	206	6.23	118	8.51	324	6.9
Epilepsy	0.54	0.65	10	0.30	4	0.29	14	0.3
Insanity	0.85	1.24	28	0.85	19	1.37	47	1.0
Diabetes	5.59	8.82	195	5.89	124	8.94	319	6.8

From the above table, it will be seen that in the Class of 1934, about one man in 12 and one woman in seven gave a family history of tuberculosis; one man in eleven and one woman in seven gave a family history of cancer; one man in 16 and one woman in 12 gave a family history of nervous breakdown; and one man in 16 and one woman in 11 gave a family history of diabetes. These figures and those for previous classes give a representative cross-section of the incidence of these diseases among that portion of the state's population represented in the student body.

Injuries

Table VII compares the distribution of injuries suffered by men and women under the connotation of head, chest, abdominal, and others for the Classes of 1933 and 1934.

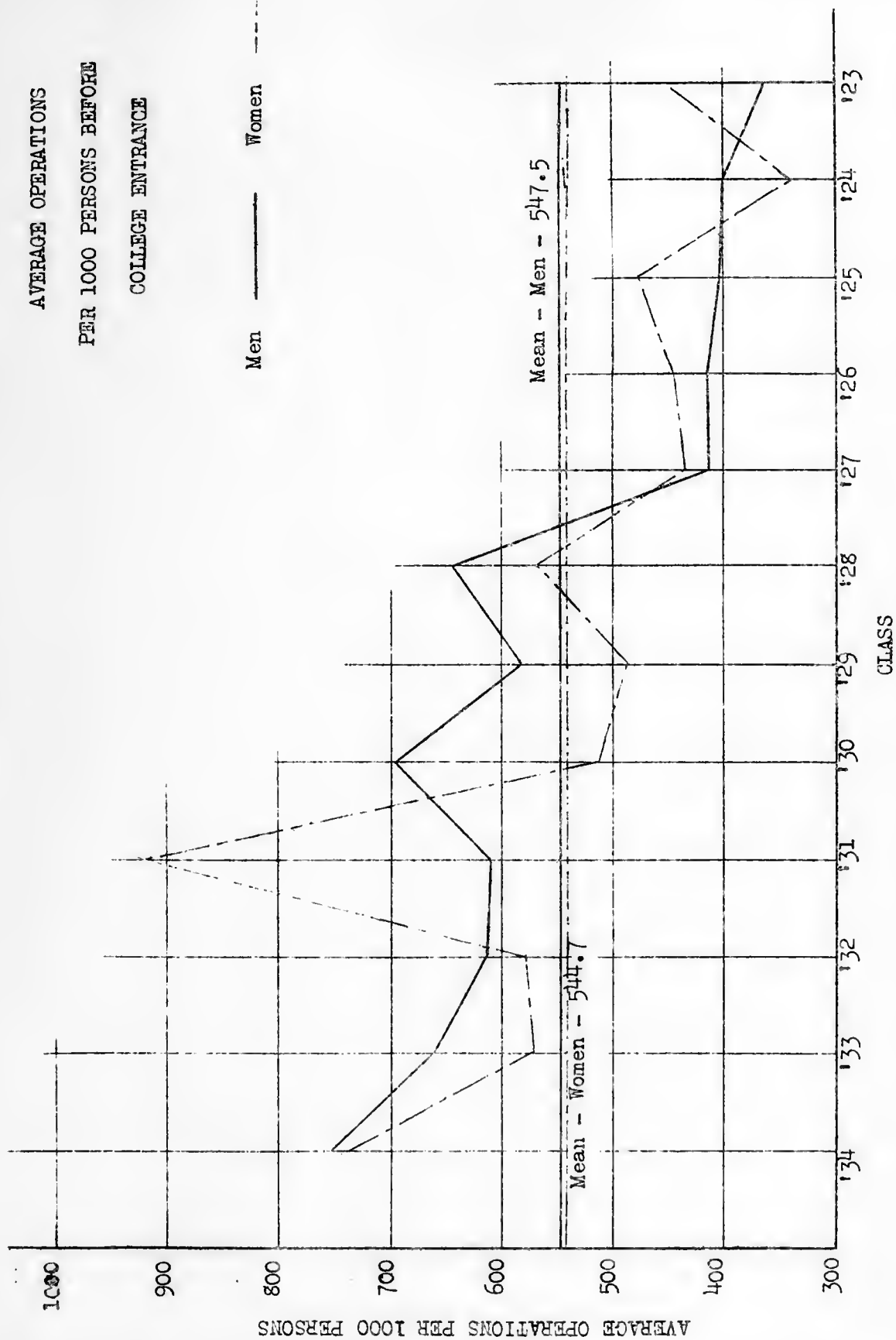
Table VII

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Head	5.09	2.02	178	5.38	42	3.03	220	4.7
Chest	2.78	1.11	95	2.87	10	.72	105	2.2
Abdomen	1.26	0.13	21	.63	1	.07	22	0.5
Other	27.59	15.47	968	29.26	185	13.34	1153	24.6



AVERAGE OPERATIONS  
PER 1000 PERSONS BEFORE  
COLLEGE ENTRANCE

Men ——— Women - - - -





### Operations

The percentages of men and women having major and minor operations are given in the table below. The head operations are mainly these for removal of tonsils, and the abdominal operations, appendicitis.

Table VIII

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Head	43.65	46.02	1667	50.39	814	58.69	2481	52.8
Chest	0.35	.13	13	0.39	4	.29	17	0.3
Abdomen	9.45	7.64	307	9.28	143	10.31	450	9.6
Other	12.71	3.33	506	15.30	60	4.33	566	12.1

### Use of Tea, Coffee, and Tobacco Sleeping Habits

Table IX shows the use of tea, coffee, and tobacco by members of the Classes of 1933 and 1934, while Table X shows the sleeping habits for the same classes.

Table IX

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Coffee	56.73	47.27	1887	57.04	742	53.50	2629	56.0
Tea	21.11	25.85	808	24.35	486	35.04	1294	27.6
Tobacco	32.87	*	1086	32.83	*	*	1086	32.83
None of three	30.15	43.93	972	29.38	536	38.64	1508	32.1

\*No data

Table X

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Under 7 hours	1.77	1.96	63	1.90	29	2.09	92	2.0
7 to 9 hours	94.06	93.47	3108	93.95	1301	93.80	4409	93.9
Over 9 hours	4.17	4.57	137	4.14	57	4.11	194	4.1

# 1. Introduction

The purpose of this study is to investigate the effects of

the independent variable on the dependent variable.

The study was conducted using a quantitative research design.

The sample size was

determined using the following formula:

$$n = \frac{Z^2 \cdot p \cdot q}{e^2}$$

where  $n$  is the sample size,  $Z$  is the Z-score,  $p$  is the

proportion, and  $q$  is the proportion.

The results of the study are as follows:

The mean score of the dependent variable was

significantly higher than the control group.

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### The Occurrence of Disease

The large number of students who have had communicable diseases before entering the University (see Table XI) means they have been exposed to complications and have possibly suffered more or less serious damage to the heart, blood vessels, or kidneys which later may prove instrumental in increasing the death rate in the early decades of life from the so-called degenerative diseases. The individual who undergoes the physical strain of intoxication incidental to the having of a major communicable disease is fortunate if he does not reduce his life expectancy.

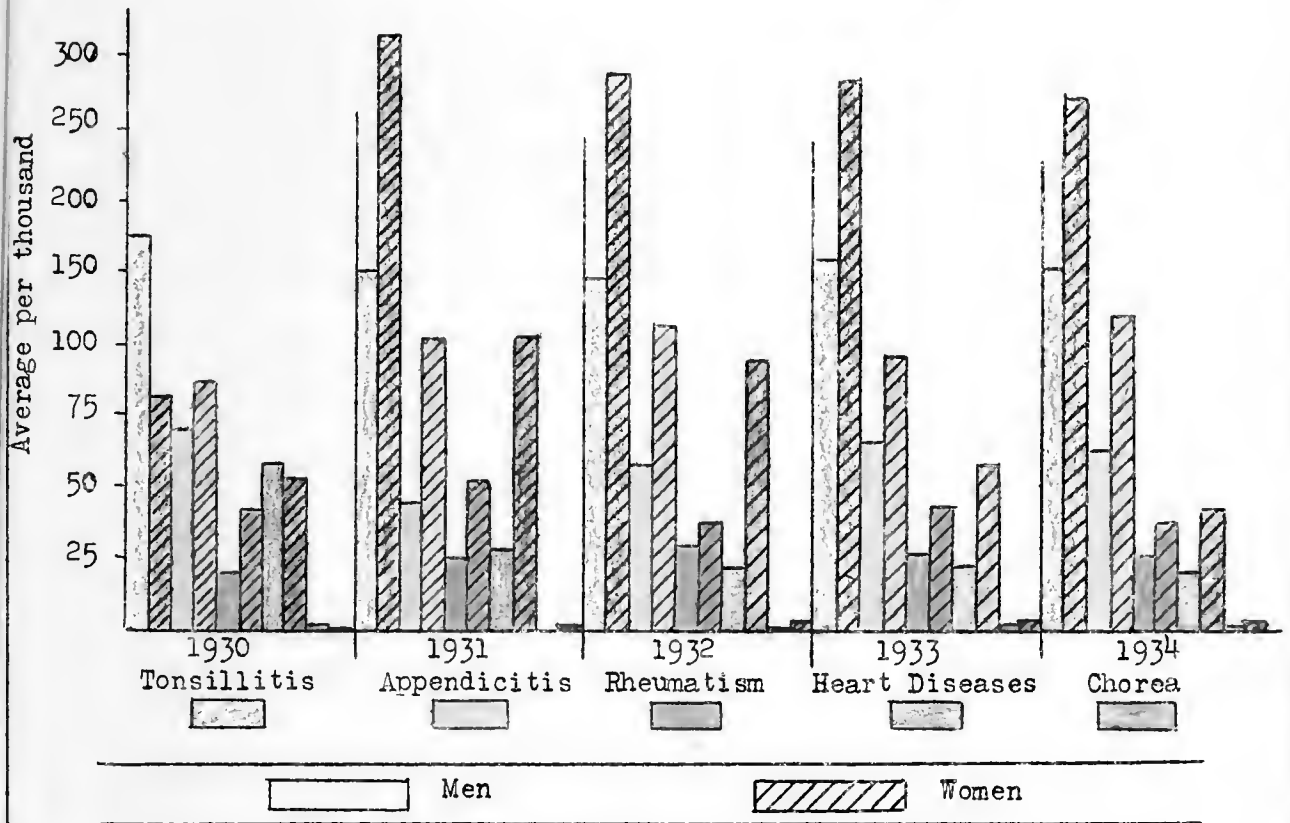
Of the Class of 1934, 381 or 8.12 per cent have had appendicitis before entering the University. The percentage in women is apparently higher than that of men, but this may be accounted for by error in diagnosis due to the mistaking of dysmenorrhea for appendicitis.

Of the women, 7.1 per cent and of the men, 6.63 per cent have had diphtheria before matriculating. The incidence of this disease is an index of the efficiency with which preventive measures are applied in the communities from which the students come. The use of the Schick test to determine susceptibles from non-susceptibles and the immunization of the non-immunes with toxin-antitoxin or toxoid would have completely prevented diphtheria.

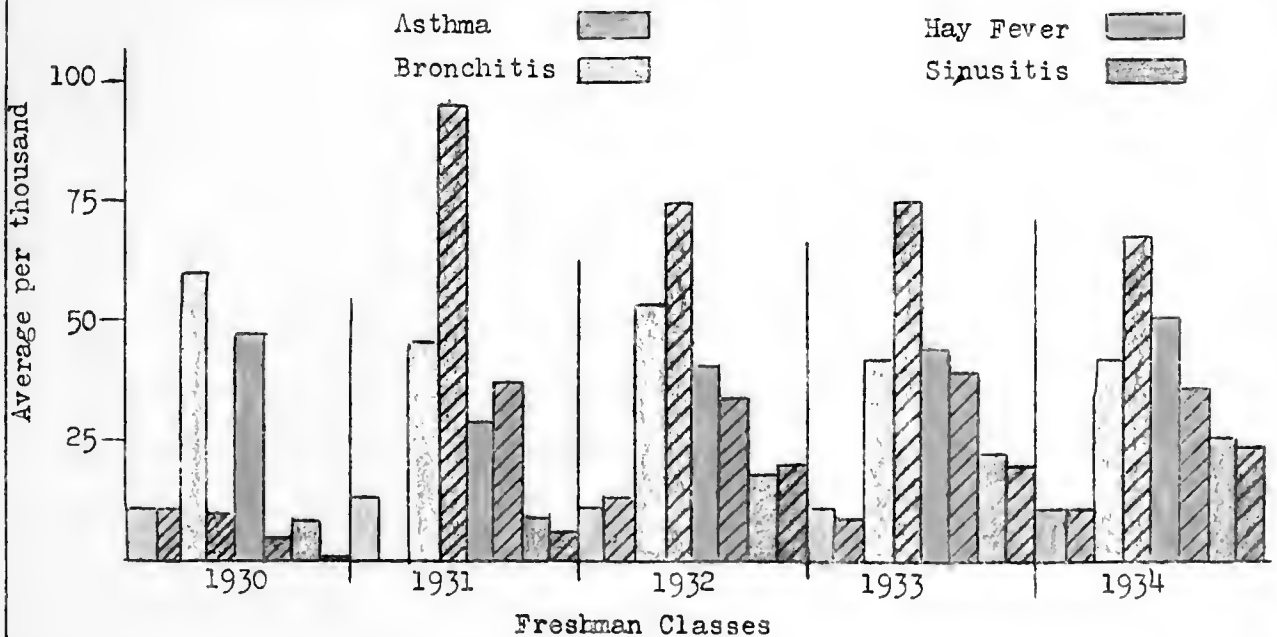
Of the students examined in the Class of 1934, 171 gave a history of discharging ear. In some of them chronic otitis media had existed from early childhood, had not been adequately treated, and still remained a menace to their health. Of the total men and women, 5.14 per cent of the former and 3.24 per cent of the latter or a total of 215 were subject to hay fever. Of the men, 9.01 and of the women 14.64 per cent reported



RELATIVE PREVALENCE OF TONSILLITIS, APPENDICITIS, RHEUMATISM,  
ORGANIC HEART DISEASES, AND CHOREA IN FRESHMAN CLASSES FOR PAST FIVE YEARS



RELATIVE PREVALENCE OF ASTHMA, BRONCHITIS, HAY FEVER,  
AND SINUSITIS IN FRESHMAN CLASSES FOR PAST FIVE YEARS





they were subject to regular and persistent headache. Such a condition is to be expected when out of the 59 per cent of the students having errors of refraction, only 31 per cent have them corrected.

A total of 35 of the Class of 1934 (27 men and 8 women) have had infantile paralysis and were more or less seriously crippled as a result of the atrophy and deformity associated with this disease. Of the members of this class, 0.48 per cent of the men and 2.09 per cent of the women had suffered a nervous breakdown. This is rather significant because the usual age of matriculants is 18 years for men and 19 years for women. Nervous instability may be anticipated in students where 6.9 per cent of their family histories show the nervous breakdown of an immediate relative.

Of the men 2.72 per cent and of the women 3.89 per cent gave a history of rheumatic fever. At the physical examination, it was found that 2.02 per cent of the men and 2.81 per cent of the women had valvular heart lesions. Of the Class of 1934, 1022 students had had chorea, rheumatic fever, or repeated attacks of tonsillitis, diseases whose complications frequently result in damage to the heart. In chorea and rheumatic fever this complication occurs as frequently as from 50 to 75 per cent. Such a history points to a part of the reason for the steady increase in the mortality rates of heart diseases.

Of the men, 15.27 per cent and of the women 12.69 per cent were unvaccinated. This large percentage of susceptibles to smallpox among members of the more intelligent families of the state does much to explain the occurrence of thousands of cases of smallpox in the state and the costs incidental to them. A total of 185 students had had smallpox before coming to the University, a fact which raises a question as to the



ability of the American people to protect itself even when effective and well known methods are available.

The situation in regard to typhoid fever, however, is encouraging. Of the students who entered the University ten years ago, 7.23 per cent gave a history of having had typhoid fever. By last year, this figure had declined to 2.09 per cent. While there has been a marked decrease, the number of students who have had typhoid fever still justifies the University regulation in regard to food-handlers.

Table XI

Students Giving Histories of Typhoid Fever

Class of 1925	7.28 %
Class of 1926	6.67
Class of 1927	5.15
Class of 1928	4.86
Class of 1929	4.08
Class of 1930	3.72
Class of 1931	2.79
Class of 1932	2.83
Class of 1933	3.02
Class of 1934	2.09



Table XII

## RELATIVE OCCURRENCE OF CERTAIN DISEASES

IN HISTORIES OF THE CLASS OF 1934

(4695 students)

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Abscess	4.4	4.9	189	5.71	58	4.18	247	5.26
Appendicitis	6.5	9.6	213	6.44	168	12.11	381	8.12
Asthma	1.1	.8	35	1.06	15	1.08	50	1.06
Boils	21.1	10.4	807	24.4	164	11.82	971	20.68
Bronchitis	4.3	7.6	143	4.32	94	6.78	237	5.05
Chickenpox	48.8	64.7	1635	49.43	955	68.85	2590	55.17
Chorea	.2	.3	2	.06	4	0.29	6	.13
Constipation	3.	6.4	127	3.84	107	7.71	234	4.98
Diphtheria	7.9	8.5	235	7.1	92	6.63	327	6.96
Discharging ear	4.2	4.4	115	3.48	56	4.04	171	3.64
Dysentery	0.3	0.4	10	.3	8	.58	18	.38
Erysipelas	.2	.3	17	.51	8	.58	25	.53
Gonorrhea	.2	.1	9	.27	0	.0	9	.19
Hemorrhoids	.5	.8	16	.48	9	.65	25	.53
Hay fever	4.4	3.9	170	5.14	45	3.24	215	4.58
Headaches	4.6	10.3	298	9.02	203	14.64	501	10.67
Heat stroke	.6	.6	18	.54	10	.72	28	.6
Infantile paralysis	.7	.7	27	.82	8	.58	35	.75
Influenza	37.4	42.9	1105	33.4	515	37.13	1620	34.5
Jaundice	1.7	3.3	49	14.81	44	3.17	93	1.98
Malaria	2.3	3.1	81	2.45	38	2.74	119	2.53
Measles	70.7	82.3	2353	71.13	1168	84.21	3521	74.99
German measles	13.8	22.2	494	14.92	282	20.33	776	16.53
Meningitis	.2	.1	7	.21	1	.07	8	.17
Mumps	48.4	51.3	1631	49.3	724	52.2	2355	50.16
Nervous breakdown	.2	2.6	16	.48	29	2.09	45	.96
Neuritis	.3	1.2	12	.36	9	.65	21	.45
Pleurisy	1.9	1.9	76	22.97	30	2.16	106	2.26
Pneumonia	10.2	11.9	338	10.22	167	12.04	505	10.76
Rheumatism	2.7	4.4	90	2.72	54	3.89	144	3.07
Scarlet fever	13.6	14.6	472	14.27	246	17.74	718	15.29
Sinusitis	2.3	2.1	88	2.66	33	2.38	121	2.58
Smallpox	4.1	4.1	141	4.26	44	3.17	185	3.94
Spinal disease	.2	.3	3	.09	7	.5	10	.21
Syphilis	.0	.1	0	.0	1	.07	1	.02
Sunstroke	.4	.5	15	.45	5	.36	20	.42
Tonsillitis	15.8	28.3	502	15.17	370	26.68	872	18.57
Tuberculosis	.4	.3	17	.51	10	.72	27	.58
Typhoid fever	3.	3.1	79	2.39	19	1.37	98	2.09
Whooping cough	47.4	60.7	1544	46.67	864	62.29	2408	51.29



From Table XIII it is seen that, in general development, the tendency is to classify more women as excellent and fair and more men as good. In nutrition the men tend to the mean, while the women tend more to the extremes of underweight and obesity, apparently a normal trend as such differences are also found in boys and girls from nine to sixteen years old. In build, fewer women than men are classified as stocky, and more as slender.

Table XIII

## GENERAL DEVELOPMENT

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Excellent	1.58	19.06	32	0.97	161	11.61	193	4.1
Good	77.98	51.7	2699	81.59	861	62.08	3560	75.8
Fair	18.84	23.43	545	16.48	352	25.38	897	19.1
Poor	1.64	5.81	32	.97	13	.94	45	1.0

## NUTRITION

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Thin	13.68	23.76	478	14.45	283	20.4	761	16.2
Average	84.11	68.86	2758	84.19	1021	73.61	3779	80.5
Obese	2.21	7.38	72	2.18	83	5.98	155	3.3

## BUILD

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Stocky	19.44	13.38	373	11.28	111	8.	484	10.3
Medium	56.35	53.79	2288	69.17	757	54.58	3045	64.9
Slender	24.18	32.83	647	19.56	519	37.42	1166	24.8

Color of Eyes and Hair

An examination of Table XIV shows a high degree of correlation in the incidence of the various colors in the eyes of men and women. This is



also true in regard to the color of hair, with a rather striking exception in the case of reddish hair, where the women last year outnumbered the men five to one.

Table XIV

## COLOR OF EYES

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Blue	38.88	37.4	1355	40.96	524	37.78	1879	40.0
Gray	7.05	11.61	259	7.83	137	9.88	396	8.4
Greenish	9.92	5.74	255	7.71	93	6.71	348	7.4
Hazel	9.1	10.9	198	5.99	149	10.74	347	7.4
Brown	33.98	31.27	1202	36.34	461	33.24	1663	35.4
Dark	1.07	3.07	39	1.18	23	1.66	62	1.3

Table XV

## COLOR OF HAIR

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Flaxen	6.23	5.81	199	6.02	77	5.55	276	5.9
Reddish	2.78	4.7	68	1.06	72	5.19	140	3.0
Light Brown	20.1	21.02	712	21.52	314	22.64	1026	21.9
Brown	42.92	32.11	1298	39.24	415	29.92	1713	36.5
Dark Brown	18.9	25.52	691	20.89	393	28.33	1084	23.1
Black	9.07	10.84	340	10.28	113	8.15	453	9.6

## TEETH

From Table XVI one can see that women take better care of their teeth than men. The women's teeth contain fewer cavities; a smaller number are missing; and they are less likely to need cleaning. This difference is presumably an index to the use of oral hygiene by the two sexes and indicates the possibility of improvement on the part of the men.

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Table XVI

## TEETH

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Cavity	28.1	7.44	887	26.81	137	9.88	1024	21.8
Absent	30.31	26.11	1213	36.67	416	29.99	1629	34.7
Need cleaning	34.77	12.27	665	20.1	215	15.5	880	18.7
Diseased gums	6.19	6.98	164	4.96	16	1.15	180	3.8
In normal condition	49.87	58.68	1356	40.99	757	54.58	2113	45.00

Table XVII

## ABNORMALITIES OF HEART

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Enlarged	0.	.2	0	0.	0	0.	0	0.
Irregular	.25	1.37	5	.15	20	1.44	25	.53
Murmur								
Aortic	.13	.13	6	.18	0	0.	6	.13
Mitral	1.87	3.0	53	1.6	30	2.2	83	1.8
Unclassified	.13	1.17	8	.24	9	.65	17	.34

From Table XVII it will be observed that 2.02 per cent of the men and 2.85 per cent of the women of the Class of 1934 had valvular heart lesions, and .15 of one per cent of the men and 1.44 per cent of the women had cardiac irregularity. A reference to Table XI reveals that of the Class of 1934, .06 of one per cent of the men and .29 of one per cent of the women gave a history of chorea, 7.1 per cent of the men and 6.63 per cent of the women diphtheria, 10.22 per cent of the men and 12.04 per cent of the women pneumonia, 2.72 per cent of the men and 3.89 per cent of the women rheumatism, 14.27 per cent of the men and 17.74 per cent of the women scarlet fever, and 15.17 per cent of the men and 26.68 per cent of the women tonsillitis.

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These diseases are frequently followed by endocarditis and consequent organic disease of the heart valves. The prevention of cardiac disease is largely a problem of controlling these infections.

The cases of cardiac irregularity, with rare exceptions, were extra systoles in individuals without any history of heart disease or any evidence of abnormality.

### THYROID ENLARGEMENT

Table XVIII

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	No.	%	No.	%	No.	%	No.	%
Slight	184	4.46	207	14.92	391	8.3		
Moderate	9	1.14	23	1.66	32	0.7		
Marked	0	.03	0	0.	0	0.		
Total	193	5.63	230	16.58	423	9.0		

From Table XVIII it will be seen that 5.83 per cent of the men in the Class of 1934 have enlarged thyroids, the percentage for thyroid hypertrophy for the women tending to be approximately three times that of the men. The percentage of women who have moderate or marked enlargement of the thyroid glands is nearly six times that of the men. The greater part of this thyroid hypertrophy in men and women is unaccompanied by symptoms and is more an expression of age and locality than of a pathological condition.

### THYROID ENLARGEMENT FOR SIX YEARS

Table XVIII (a)

	Men %			Women %		
	Slight	Moderate	Marked	Slight	Moderate	Marked
1934	5.56	.27	0.	14.92	1.66	0.
1933	4.46	1.14	.03	24.41	3.19	.06
1932	5.97	.67	.03	21.1	4.08	.24
1931	5.16	.89	.07	35.67	5.65	.15
1930	8.4	.6	0.	28.6	10.0	.8
1929	3.6	.79	.16	17.9	3.22	.84



A consideration of Table XVIII (a) shows that the incidence of enlarged thyroid is consistently greater among women than among men.

### CHEST AND LUNGS

Table XIX

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Chest, abnormal	6.67	5.81	193	5.83	81	5.84	274	5.8
Lungs, abnormal	.69	1.89	39	1.18	27	1.95	66	1.4

Physical examination showed that 5.8 per cent of the Class of 1934 had asymmetry or abnormality of the chest. When the condition was marked, they were assigned to corrective gymnastics. A total of 1.95 per cent of the women had abnormalities of the lungs as compared with 1.18 per cent of the men. In most instances, the findings were of minor importance and were considered to be due to bronchitis associated with coryza. In a few instances, where the lungs were abnormal, the students have been kept under observation throughout the year as to weight, temperature, appetite, etc. Most of these students gained weight and vigor and were released from observation during the year.

### INCIDENCE OF ENLARGED LYMPH GLANDS

Table XX

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Epitrochlear	5.18	.13	78	2.36	0	0.	78	1.1
Axillary	10.94	.2	595	17.99	1	.07	596	12.7
Cervical	18.84	17.04	643	19.44	110	7.93	753	16.0
Inguinal	28.45	1.89	1020	30.83	3	.22	1023	21.8



It will be seen by consulting Table XX that enlargement of the lymph glands is markedly less in women than in men. This is largely explainable by the fact that the men are more exposed to injury and slight infections which cause enlargement of the lymph glands. This difference is also an expression of more vigorous exercise and of more active and exposed life.

#### CONDITION OF ABDOMINAL WALLS

Table XXI

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Abdomen								
Rigid	.85	1.31	58	1.75	14	1.01	72	1.5
Relaxed	.22	15.4	13	.39	20	1.44	33	0.7
Hernia	1.74	.52	43	1.3	4	.29	47	1.0

#### HERNIA IN MEN

Table XXI(a)

	%		
1934	1.3	1929	1.51
1933	1.74	1928	1.4
1932	1.41	1927	3.16
1931	1.26	1926	6.13
1930	1.35	1925	5.42

Over a ten-year period, hernia has been found in an average of 2.47 per cent of men students. Statistical information of the War Department shows that in the draft hernia was found in 4 per cent of men of military age. The lower incidence among students may be explained by their lesser exposure to the physical strains of heavy manual labor and their lower average age.



## PALPABILITY OF CERTAIN INTERNAL ORGANS

Table XXII

	1933		1934				Total	
	Men	Women	Men		Women		No.	%
	%	%	No.	%	No.	%	No.	%
Liver	.15	.2	2	.06	2	.14	4	0.1
Kidneys	.15	.2	3	.09	1	.07	4	0.1
Spleen	.13	.06	2	.06	1	.07	3	0.1

## GENITO-URINARY ORGANS

Table XXIII

Classification of Abnormalities

	1933	No.	1934
	Men %		Men %
Testes			
Atrophied	.41	12	.36
Enlarged	.15	6	.18
Undescended	.32	23	.7
Hydrocele	.09	6	.18
Varicocele	12.01	498	15.05
Circumcision	35.71	1298	39.24

Table XXIII (a)

Cryptorchidism

1934	.74	1929	.75
1933	.32	1928	.77
1932	.6	1927	.23
1931	.38	1926	.58
1930	.71	1925	.58

Mean, .56

The incidence of cryptorchidism (undescended testicle) for ten years averages 0.56 of one per cent. This is considerably higher than the War Department figure of 0.31 of one per cent for men examined in the draft.



## URINALYSIS

Table XXIV

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Acid	74.72	85.24	2557	77.3	845	60.92	3402	72.5
Alkaline	20.79	10.84	704	21.28	291	20.98	995	21.2
Neutral	4.49	3.92	47	1.43			47	1.0
Sugar	.09	.85	7	.21	11	.79	18	0.4
Albumin	2.62	1.44	187	5.65	41	2.97	228	4.9

Laboratory Examinations

In the Class of 1934, 5.65 per cent of the men and 2.97 per cent of the women showed albuminuria. In most cases this condition is transient. As can be seen by reference to Table XXIV, the percentage of students who showed glycosuria is small. This condition in most cases was found to be transient.

Table XXIV (a)

Glycosuria and Albuminuria over a Period of Years

	<u>Sugar</u>		<u>Albumin</u>	
	Men	Women	Men	Women
	%	%	%	%
1934	.21	.79	5.65	2.97
1933	.09	.85	2.62	1.44
1932	.06	.48	3.60	2.10
1931	.58	1.86	5.71	2.75
1930	.19	.60	7.33	4.40
1929	.12	.07	3.75	.49
1928	.84	.41	3.10	.49
1927	.04	.07	7.80	4.30
1926	1.35	.11	7.44	6.21
1925	3.69	.43	6.98	.75
Mean	.72	.57	5.40	2.59

A reference to Table XXIV (a) reveals that over a period of ten years the incidence of glycosuria has been slightly higher among men than among women, while that of albuminuria has been approximately twice as high among men.

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# 1. Introduction

The purpose of this study is to investigate the effects of the proposed system on the performance of the system. The study is divided into two main parts: a theoretical analysis and an experimental evaluation. The theoretical analysis is based on the principles of the system and the experimental evaluation is based on the results of the experiments.

## 2. Theoretical Analysis

The theoretical analysis is based on the principles of the system and the experimental evaluation is based on the results of the experiments. The theoretical analysis is based on the principles of the system and the experimental evaluation is based on the results of the experiments. The theoretical analysis is based on the principles of the system and the experimental evaluation is based on the results of the experiments. The theoretical analysis is based on the principles of the system and the experimental evaluation is based on the results of the experiments.

## FOOT ABNORMALITIES

Table XXV

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Long arches								
1st degree	9.99	17.3	645	19.5	162	11.68	807	17.2
2nd degree	7.74	17.17	322	9.73	129	9.3	451	9.6
3rd degree	1.33	5.94	67	2.03	21	1.51	88	1.9
Anterior arches	15.23	42.17	738	22.31	394	28.41	1132	24.1

Table XXV (a)

Foot Abnormalities Over a Period of Years

	1st Degree		Long Arches 2nd Degree		3rd Degree		Anterior Arches	
	Men	Women	Men	Women	Men	Women	Men	Women
	%	%	%	%	%	%	%	%
1934	19.5	11.68	9.73	9.3	2.03	1.51	22.31	28.41
1933	9.99	17.3	7.74	17.17	1.33	5.94	15.23	42.17
1932	18.4	17.5	10.9	27.8	2.5	19.8	27.1	27.5
1931	15.82	29.78	11.35	33.22	3.28	11.0	20.25	23.18
1930	16.49	33.62	14.41	14.47	4.80	5.27	24.79	45.30
Mean	16.04	21.98	10.83	20.39	2.79	8.70	21.94	33.31

As appears from the above table, foot abnormalities are definitely higher among women than among men. This condition is readily explained by the type of footwear worn by women.

## SPINE ABNORMALITIES

Table XXVI

	1933		1934					
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Kyphosis	2.65	3.98	128	3.87	10	.72	138	2.9
Lordosis	4.2	4.83	180	5.44	11	.79	191	4.1
Scoliosis	6.19	8.09	201	6.08	78	5.62	279	5.9

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## NOSE ABNORMALITIES

Table XXVII

	1933		1934				Total	
	Men	Women	Men		Women		No.	%
	%	%	No.	%	No.	%	No.	%
Spur	3.32	2.35	113	3.42	41	2.96	154	3.3
Deviated Septum	15.17	19.78	597	18.05	205	14.78	802	17.1
Atrophied	.03	.33	7	.22	0	0.	7	0.1
Hypertrophy	4.61	5.48	193	5.83	30	2.16	223	4.7
Other	.03	8.22	50	1.51	178	12.83	228	4.9
Adenoids	.35	1.76	6	.18	97	6.99	103	2.2

## THROAT ABNORMALITIES

Table XXVIII

	1933		1934				Total	
	Men	Women	Men		Women		No.	%
	%	%	No.	%	No.	%	No.	%
Tonsils								
Absent	42.48	45.56	1403	42.41	570	41.1	1973	42.0
Pathological	11.35	18.54	350	10.58	307	22.13	657	14.0
Tags	8.63	9.27	289	8.74	151	10.89	440	9.4
All other	.19	.85	6	.18	4	.29	10	0.2

Percentage of Students with Tonsils  
Removed, Over a Period of Years

	Men	Women
1934	42.41%	41.1%
1933	42.48	45.56
1932	37.3	37.2
1931	35.77	42.42
1930	30.76	38.30
1929	28.78	33.77
1928	20.3	29.8
1927	11.7	20.59

From the above figures it may be noted that there is a very definite trend in the direction of an increased percentage of students who have had their tonsils removed before entering the University. The percentage among women tends to be greater, although there is a high de-



groce of correlation between the figures for men and women.

## EARS

Table XXIX

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Cerumen	18.39	13.64	284	8.59	65	4.69	349	7.4
Drum, re- tracted	1.3	.13	60	1.81	2	.14	62	1.3
Drum, per- forated	.54	.26	11	.33	1	.07	12	0.3
Some abnormality in both ears	.41	5.81	158	4.78	100	7.21	258	5.5
Hearing abnor- mal	.76	.72	22	.67	2	.14	24	0.6

## EYES

Table XXX

	1933		1934				Total	
	Men	Women	Men		Women		Total	
	%	%	No.	%	No.	%	No.	%
Lids abnormal	.35	.85	4	.12	0	0.	4	0.1
Muscles, abnormal	1.96	0.	4	.12	0	0.	4	0.1
Refraction								
O. D.	7.71	12.6	265	8.01	153	11.03	418	8.9
O. S.	7.11	13.77	260	7.86	163	11.75	423	9.0
Both O. D. and O. S.	26.99	55.09	1096	33.13	844	60.85	1940	41.3
Corrected	9.45	5.87	511	15.45	347	25.02	858	18.3
Conjunctivi- tis	1.14	.46	15	.45	2	.14	17	0.4
Wear Glasses	25.6	35.38	847	25.6	531	38.28	1378	29.4
Pupils	.32	0	2	.06	0	0.	2	0.04

Aural defects are considerably higher in women than in men. This finding is not inconsistent with the fact that women have more communicable diseases and tonsillitis which are associated with inflammation of the middle ear. A greater per cent of the women than of the men have defects of



vision and wear glasses. Of both the women and men having errors of refraction, approximately 70 per cent have their condition uncorrected.

The findings in the medical records of students are indexes of the health administration in their communities, of the progress medicine has made in their neighborhood, of the modernness of the school system under which they have been trained, of their hereditary tendencies, and of the alertness of parents in preserving the health of their children.

When the skeleton, teeth, musculature, weight, and posture show the marks of an unbalanced diet, lack of exercise, and of bad environment, and when remediable defects remain uncorrected, the evidence is conclusive that economics, education, and medicine have failed to meet their full obligation to the commonwealth and to the nation.

Respectfully submitted,

J. Howard Beard, M. D.  
University Health Officer

University of Illinois  
December, 1931



FIFTEENTH ANNUAL REPORT OF HEALTH SERVICE

APPENDIX I

COMPARATIVE STUDY OF STUDENTS WHO  
GAVE HISTORIES OF WORRY OR "BLUES"

by

Vergil A. Ross, M.D.  
Assistant University Health Officer



# FIFTEENTH ANNUAL REPORT OF HEALTH SERVICE

## APPENDIX I

### COMPARATIVE STUDY OF STUDENTS WHO GAVE HISTORIES OF WORRY OR "BLUES"

by

Vergil A. Ross, M.D.  
Assistant University Health Officer

A study was made of the men who entered the University in the fall of 1930 to determine whether those who indicated they worried or had the "blues" or a combination of both showed any significant variation from those who indicated they neither worried nor had the "blues". A comparison of the scholastic standing, intelligence rating and health records was made. I am indebted to Prof. Herbert Woodrow, Head of the Department of Psychology, for the intelligence ratings and to Fred H. Turner, Dean of Men, for data on the scholastic standing of students.

#### SCHOLASTIC RECORDS

History of no worry or "blues"	2784	Worry and "blues"	204
Probation	526 18.9%	49	24.0%
Dropped	145 5.2	14	6.9
Others	2113 75.9	141	69.1

#### INTELLIGENCE RATING RECORDS

This investigation was made of the above mentioned group of worries and "blues", who were put on probation or were dropped, with a control group. There is a slight discrepancy between the number studied and those given above as information was not available on all of them due to the fact that



all new students were classed as freshmen irregardless of credit hours they may have had, while the Psychology Department took only the intelligence rating of those who entered the University with no credit hours. So we studied only those whose intelligence rating was obtainable,

	Worry or "blues" or a combination of both	Not worry or "blues"
Average percentile of 43 students put on probation	44.23	38.96
Average percentile of 13 stu- dents dropped	26.01	25.40
Average percentile of 80 students not put on probation or dropped	55.78	57.44

### HEALTH RECORDS

From our health records of the group studied under intelligence rating records, material was collected which might have some bearing upon the scholastic attainments of these men.

A. Students put on probation, who do not worry or have the "blues".

B. Students put on probation who worry or have the "blues" or a combination of both.

Number studied in each group — 43

	<u>Group A</u>		<u>Group B</u>	
		%		%
Signifying intention of working for self-support	16	37.2	17	39.5
Volitional calls	194,	ratio 4.5 to 1	220,	ratio 5.1 to 1
Excuses granted	41,	ratio .95 to 1	28,	ratio 6.5 to 1
Underweight	6	13.9	6	13.9
Defective vision, no record of correction (all having been advised of defect)	10	23.2	4	9.3
Sent to Hospital from Health Service	5	11.6	4	9.3
Tachycardia at time of examination	7	16.3	8	18.6
Hypertension at time of examination	8	18.6	5	11.6
Adolescent albuminuria	5	11.6	0	0.

1. The first part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation  $f(x) = \int_0^x f(t) dt$ . It is shown that  $f(x)$  is a constant function, and its value is determined by the initial condition  $f(0) = 1$ .

2. In the second part, we consider the problem of finding the maximum value of the function  $f(x)$  on the interval  $[0, 1]$ . It is shown that the maximum value is attained at  $x = 0$  and is equal to 1.

3. The third part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation  $f(x) = \int_0^x f(t) dt$ . It is shown that  $f(x)$  is a constant function, and its value is determined by the initial condition  $f(0) = 1$ .

4. In the fourth part, we consider the problem of finding the maximum value of the function  $f(x)$  on the interval  $[0, 1]$ . It is shown that the maximum value is attained at  $x = 0$  and is equal to 1.

5. The fifth part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation  $f(x) = \int_0^x f(t) dt$ . It is shown that  $f(x)$  is a constant function, and its value is determined by the initial condition  $f(0) = 1$ .

6. The sixth part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation  $f(x) = \int_0^x f(t) dt$ . It is shown that  $f(x)$  is a constant function, and its value is determined by the initial condition  $f(0) = 1$ .

7. In the seventh part, we consider the problem of finding the maximum value of the function  $f(x)$  on the interval  $[0, 1]$ . It is shown that the maximum value is attained at  $x = 0$  and is equal to 1.

C. Students dropped who do not worry or have the "blues".

D. Students dropped who worry or have the "blues", or a combination of both.

Number studied in each group -- 13

	<u>Group C</u>		<u>Group D</u>	
		%		%
Signifying intention of working for self-support	3	23.0	5	38.4
Volitional calls	38,	ratio 2.9 to 1	86,	ratio 6.6 to 1
Excuses granted	5,	ratio .4 to 1	20,	ratio 1.5 to 1
Underweight	3	23.0	5	38.4
Defective vision, no record of correction (all having been advised of defect)	3	23.0	5	38.4
Sent to Hospital from Health Service	1	7.7	3	23.0
Tachycardia at time of examination	1	7.7	2	15.3
Hypertension at time of examination	1	7.7	3	23.0
Adolescent albuminuria	1	7.7	1	7.7
*Miscellaneous				
Marked Mitral Insufficiency			1	7.7
Basal Metabolism Rate $\neq$ 24			1	7.7

E. Students not dropped or put on probation who do not worry or have the "blues".

F. Students not dropped or put on probation who do worry or have the "blues" or a combination of both.

Number studied in each group -- 80

	<u>Group E</u>		<u>Group F</u>	
		%		%
Signifying intention of working for self-support	44	55.0	40	50.0
Volitional calls	393,	ratio 4.9 to 1	310,	ratio 3.8 to 1
Excuses granted	67,	ratio .8 to 1	42,	ratio .52 to 1
Underweight	12	15.0	19	23.7
Defective vision, no record of correction (all having been advised of defect)	18	22.5	14	17.5
Sent to Hospital from Health Service	15	18.7	12	15.0
Tachycardia at time of examination	14	17.5	11	13.7
Hypertension at time of examination	13	16.2	8	10.0
Adolescent albuminuria	11	13.7	2	2.5
*Miscellaneous				
Heart observation	1	1.2		

\*Any outstanding physical condition not mentioned above that might influence students' intelligence rating, mental stability, and scholastic standing.



## Comparison of Groups E and F Continued.

	<u>Group E</u>	<u>Group F</u>
Miscellaneous		
Chronic suppurative otitis media	1	1
Observation, lungs		1
Mitral insufficiency		1
Mitral stenosis and mitral insufficiency		1

While no definite conclusions can be made from the above material, this preliminary study reveals certain points that might be worthy of further investigation.



ANNUAL REPORT OF THE HEALTH SERVICE

1930 - 1931

APPENDIX II



# FIFTEENTH ANNUAL REPORT OF HEALTH SERVICE

## APPENDIX

Table I

### SUMMARY OF MEDICAL HISTORIES

	<u>Men</u>	<u>Women</u>	<u>Class of '34</u> <u>Total</u>	<u>Class of '33</u> <u>Total</u>
Total number examined	3308	1387	4695	4696
Total number re-examined	1744	355	2099	1844
Tuberculosis (family history)	269	193	462	446
Cancer (family history)	303	210	513	504
Nervous breakdown (family history)	206	118	324	321
Diabetes (family history)	195	124	319	312
Epilepsy (family history)	10	4	14	27
Insanity (family history)	28	19	47	46
Injuries				
Head	178	42	220	192
Chest	95	10	105	105
Abdomen	21	1	22	42
Other	968	185	1153	1110
Operations				
Head	1667	814	2481	2086
Chest	13	4	17	14
Abdomen	307	143	450	416
Other	506	60	566	453
Sleep				
Under 7 hours	63	29	122	86
7 - 9 hours	3108	1301	4409	4408
Over 9 hours	137	57	194	202
Stimulants				
Tea	808	486	1294	1064
Coffee	1887	742	2629	2519
Tobacco	1086		1086	1040
Diseases had				
Abscess	189	58	247	213
Appendicitis	213	168	381	352
Asthma	35	15	50	47
Boils	807	164	971	828
Bronchitis	143	94	237	253
Chickenpox	1635	955	2590	2537
Chorea	2	4	6	9
Constipation	127	107	234	194
Diphtheria	235	92	327	381
Discharging ear	115	56	171	201



Table I - Continued

	<u>Men</u>	<u>Women</u>	<u>Class of '34</u> <u>Total</u>	<u>Class of '33</u> <u>Total</u>
Dysentery	10	8	18	17
Epilepsy	2	0	2	0
Erysipelas	17	8	25	11
Gonorrhea	9	0	9	6
Hemorrhoids	16	9	25	30
Hay fever	170	45	215	200
Headache	298	203	501	304
Heat stroke	18	10	28	28
Infantile paralysis	27	8	35	31
Influenza	1105	515	1620	1842
Jaundice	49	44	93	105
Malaria	81	38	119	121
Measles	2353	1168	3521	3500
German Measles	494	282	776	777
Meningitis	7	1	8	8
Mumps	1631	724	2355	2320
Nervous breakdown	16	29	45	48
Neuritis	12	9	21	29
Pleurisy	76	30	106	90
Pneumonia	338	167	505	505
Rheumatism	90	54	144	154
Scarlet fever	472	246	718	654
Sinusitis	88	33	121	105
Smallpox	141	44	185	193
Spinal disease	3	7	10	10
Syphilis	0	1	1	2
Sunstroke	15	5	20	22
Tonsillitis	502	370	872	934
Tuberculosis	17	10	27	19
Typhoid fever	79	19	98	141
Whooping cough	1544	864	2408	2430
Glasses	847	531	1378	1352
Smallpox vaccination	2803	1211	4014	3924
Typhoid vaccination	626	66	692	609

Table II - Appendix

SUMMARY OF PHYSICAL EXAMINATIONS

	<u>Men</u>	<u>Women</u>	<u>Class of '34</u> <u>Total</u>	<u>Class of '33</u> <u>Total</u>
General Development				
Excellent	32	161	193	342



Table II - Continued

	<u>Men</u>	<u>Women</u>	<u>Class of '34</u> <u>Total</u>	<u>Class of '33</u> <u>Total</u>
General Development, Con't.				
Good	2699	861	3560	3258
Fair	545	352	897	955
Poor	32	13	45	141
Nutrition				
Thin	478	283	761	797
Average	2758	1021	3779	3716
Obese	72	83	155	183
Build				
Stocky	373	111	484	820
Medium	2288	757	3156	2608
Slender	647	519	1166	1268
Eyes				
Blue	1355	524	1879	1803
Gray	259	137	396	401
Greenish	255	93	348	402
Hazel	198	149	347	455
Brown	1202	461	1663	1554
Dark	39	23	62	81
Hair				
Fair (flaxen)	199	77	276	286
Reddish	68	72	140	160
Light brown	712	314	1026	958
Brown	1298	415	1713	1850
Dark brown	691	393	1084	989
Black	340	113	453	453
Gray	0	3	3	0
Skin				
Moist	3278	1174	4452	4277
Dry	30	212	242	419
Acne	1432	264	1696	1857
Vaccination scar				
Pitted	2087	518	2605	1868
Keloidal	87	47	134	376
Smooth	659	639	1298	1731
Under 15 mm.	816	701	1517	1569
Over 15 mm.	2018	536	2554	2375
None	475	183	658	721
Teeth				
Cavities	887	137	1024	1003
Absent	1213	416	1629	1359
Need cleaning	665	215	880	1288
Diseased gums	164	16	180	303
No abnormality	1356	757	2113	2477
Thyroid, enlarged	193	230	423	602
Evidence of toxicity	20	17	37	30



Table II - Continued

	<u>Men</u>	<u>Women</u>	<u>Class of '34</u> <u>Total</u>	<u>Class of '33</u> <u>Total</u>
Lymph nodes				
Cervical	643	110	753	857
Axillary	595	1	596	349
Inguinal	1020	3	1023	929
Epitrochlear	78	0	78	166
Chest, abnormal	193	81	274	300
Lungs, abnormal	39	27	66	51
Heart				
Enlarged	0	0	0	3
Irregular pulse	5	20	25	29
Murmur, aortic	6	0	6	6
Mitral	10	5	15	13
Systolic	43	25	68	92
Unclassified	8	9	17	22
Abdomen				
Rigid	58	14	72	47
Relaxed	13	20	33	243
Hernia				
Present	43	4	47	63
Palpable				
Liver	2	2	4	8
Spleen	2	1	3	5
Kidney	3	1	4	8
Penis (circum.)	1298		1298	1130
Testes				
Enlarged	6		6	5
Atrophy	12		12	13
Hydrocele	6		6	3
Varicocele	498		498	380
Undescended	23		23	10
Absent	1		1	0
1 absent	1		1	0
Menses				
Regular		1210	1210	1332
Irregular		173	173	200
Pain, severe		228	228	289
slight		553	553	571
Urine				
Acid	2557	845	3402	3670
Alkaline	704	291	995	824
Albumen	187	41	228	105
Sugar	7	11	18	16
Vertebral column				
Kyphosis (stooped)	128	10	138	145
Lordosis (swayback)	180	11	191	207
Scoliosis (curvature)	201	78	279	320



Table II - Continued

	<u>Men</u>	<u>Women</u>	<u>Class of '34</u> <u>Total</u>	<u>Class of '33</u> <u>Total</u>
Flat feet				
Long arches				
1st degree	645	162	807	581
2nd degree	322	129	451	508
3rd degree	67	21	88	133
Anterior arches	738	394	1132	1128
Nose				
Spur	113	41	154	141
Deviated septum	597	205	802	783
Atrophy	7	0	7	6
Hypertrophy	193	30	223	230
Other abnormalities	50	178	228	127
Adenoids	6	97	103	38
Tonsils				
Absent	1403	570	1973	2042
Pathological	350	307	657	643
Other	6	4	10	19
Tags	289	151	440	415
Ears				
Cerumen (wax)	284	65	349	791
Drum retracted	60	2	62	43
Perforated	11	1	12	21
Eyes				
Lids (abnormal)	4	0	4	24
Refraction				
O. D. only	265	153	418	437
O. S. only	260	163	423	436
Both O. D. and O. S.	1096	844	1940	1698
Corrected	511	347	858	389
Conjunctivitis	15	2	17	43
Muscles abnormal	4	0	4	62
Pupils abnormal	2	0	2	10
Missing	2	0	2	0



Table III - Appendix

CLASSIFIED SUMMARY OF PHYSICAL EXAMINATION RESULTS

	<u>MEN</u>			<u>WOMEN</u>		
	<u>Urban</u>	<u>Rural</u>	<u>Out-St.</u>	<u>Urban</u>	<u>Rural</u>	<u>Out-St.</u>
Total number examined	2233	557	518	865	259	263
Re-examined	1181	300	263	229	76	50
Inherited diseases						
Tuberculosis (family history)	155	68	46	109	42	42
Cancer (family history)	195	69	39	112	64	34
Diabetes (family history)	133	39	23	73	22	29
Neurasthenia (family history)	152	33	21	71	27	20
Insanity (family history)	21	8	0	6	9	4
Epilepsy (family history)	7	2	1	1	2	1
Injuries						
Head	126	23	29	28	8	6
Chest	71	14	10	8	2	0
Abdominal	14	5	2	0	1	0
Other	653	169	146	120	40	25
Operations						
Head	1173	256	238	506	125	183
Chest	12	1	0	3	1	0
Abdominal	206	61	40	80	35	28
Other	406	32	68	24	11	25
Sleep						
Under 7 hours	39	5	19	20	5	4
7 - 9 hours	2093	527	488	808	239	254
Over 9 hours	101	25	11	37	15	5
Stimulants						
Tea	570	109	129	304	85	97
Coffee	1316	289	282	459	141	142
Tobacco	753	137	196			
Diseases had						
Abscess	127	30	32	38	11	9
Appendicitis	142	33	38	98	39	31
Asthma	22	8	5	10	2	3
Boils	529	171	107	94	38	32
Bronchitis	102	16	25	66	8	20
Chickenpox	1061	350	224	579	192	184
Chorea	2	0	0	2	2	0
Constipation	83	27	12	59	16	32
Diphtheria	193	18	24	63	13	16
Discharging ear	88	12	15	30	17	9
Dysentery	4	2	4	6	1	1
Epilepsy	0	0	2	0	0	0
Erysipelas	11	5	1	2	2	4
Gonorrhea	7	1	1	0	0	0
Hemorrhoids	9	3	4	3	2	4



Table III - Continued

	<u>MEN</u>			<u>WOMEN</u>		
	<u>Urban</u>	<u>Rural</u>	<u>Out-St.</u>	<u>Urban</u>	<u>Rural</u>	<u>Out-St.</u>
Diseases had, Con't.						
Hay fever	107	29	34	30	6	9
Headaches (repeated)	198	50	50	116	47	40
Heat stroke	12	4	2	9	0	1
Infantile paralysis	16	6	5	4	0	4
Influenza	679	259	167	301	108	106
Jaundice	26	14	9	25	9	10
Malaria	50	15	16	17	7	14
Measles	1567	454	332	710	230	228
German measles	318	125	51	175	66	41
Meningitis	4	1	2	0	0	1
Mumps	1073	313	245	425	149	150
Nervous breakdown	14	0	2	18	5	6
Neuritis	6	4	2	6	2	1
Pleurisy	54	13	9	18	8	4
Pneumonia	229	61	48	110	30	27
Rheumatism	62	14	14	29	11	14
Scarlet fever	345	66	61	160	45	41
Sinusitis	63	7	18	22	4	7
Smallpox	83	19	39	26	7	11
Spinal disease	3	0	0	4	0	3
Syphilis	0	0	0	1	0	0
Sunstroke	12	2	1	4	0	1
Tonsillitis	346	69	87	214	77	79
Tuberculosis	10	5	2	7	1	2
Typhoid fever	41	20	18	10	3	6
Whooping cough	955	367	222	523	177	164
Glasses	645	23	179	320	102	109
Smallpox vaccination	1916	436	451	761	212	238
Typhoid vaccination	382	110	134	30	12	24
General Development						
Excellent	23	5	4	105	30	26
Good	1820	467	412	535	169	157
Fair	368	80	97	218	59	75
Poor	22	5	5	7	1	5
Nutrition						
Thin	341	63	74	167	44	72
Average	1840	482	436	643	198	180
Obese	52	12	8	55	17	11
Build						
Stocky	260	65	48	64	23	24
Medium	1531	396	361	480	150	127
Slender	442	96	109	321	86	112
Eyes						
Blue	901	259	195	339	106	79
Gray	175	56	28	87	25	25



Table III - Continued

	MEN			WOMEN		
	Urban	Rural	Out-St.	Urban	Rural	Out-St.
Eyes, Con't.						
Greenish	180	41	34	59	12	22
Hazel	129	44	25	83	31	35
Brown	827	156	219	283	84	94
Dark	21	1	17	14	1	8
Hair						
Fair (flaxen)	145	34	20	53	16	8
Reddish	41	20	7	45	12	15
Light brown	516	106	90	216	55	43
Brown	856	243	199	261	92	62
Dark brown	454	115	122	222	72	99
Black	221	39	80	65	12	36
Gray	0	0	0	3	0	0
Skin						
Acne	966	271	195	130	74	60
Moist	2214	556	508	728	222	224
Dry	19	1	10	137	37	39
Vaccination, Type scar						
Pitted	1477	307	303	341	99	78
Keloidal	56	17	14	28	10	9
Smooth	433	90	136	397	99	143
Under 15 mm.	488	176	151	420	136	126
Over 15 mm.	1478	238	302	346	72	104
None	267	143	65	99	51	33
Teeth						
Cavities	627	140	120	99	20	18
Absent	847	167	199	256	70	90
Need cleaning	432	116	117	133	49	33
No abnormality	782	306	268	474	142	141
Diseased Gums	101	33	30	10	5	1
Thyroid, enlarged	130	36	27	145	48	37
Evidence of toxicity	19	0	1	13	2	2
Lymph nodes						
Cervical	442	119	82	74	24	12
Axillary	417	104	74	0	1	0
Inguinal	691	178	151	3	0	1
Epitrochlear	48	22	8	0	0	0
Chest, abnormal	130	32	31	47	14	20
Lungs, abnormal	27	6	6	18	6	3
Heart						
Enlarged	0	0	0	0	0	0
Irregular	5	0	0	12	2	6
Murmur, aortic	5	1	0	0	0	0
Mitral	7	1	2	0	5	0
Systolic	29	9	5	16	5	4
Unclassified	3	1	4	2	7	0



Table III - Continued

	<u>MEN</u>			<u>WOMEN</u>		
	<u>Urban</u>	<u>Rural</u>	<u>Out-St.</u>	<u>Urban</u>	<u>Rural</u>	<u>Out-St.</u>
Abdomen						
Rigid	42	7	9	10	2	2
Relaxed	9	1	3	15	2	3
Hernia, present	26	11	6	3	0	1
Palpable						
Liver	2	0	0	0	1	1
Spleen	2	0	0	0	0	1
Kidneys	3	0	0	0	1	0
Testes						
Atrophied	8	3	1			
Enlarged	6	0	0			
Undescended	14	3	6			
Hydrocele	6	0	0			
Varicocoele	357	70	71			
Absent	1	0	0			
1 absent	0	0	1			
Penis, circumcision	1003	114	131			
Urine						
Acid	1739	385	433	662	183	207
Alkaline	465	158	81	172	70	49
Albumin	127	35	25	27	10	4
Sugar	3	4	0	3	5	3
Menses						
Regular				748	229	233
Irregular				113	30	30
Pain, slight				328	112	113
severe				143	42	43
Vertebral column						
Kyphosis	77	29	22	6	2	2
Lordosis	127	25	28	10	0	1
Scoliosis	134	44	23	50	10	18
Flat feet						
Long arches						
1st degree	455	90	100	67	53	42
2nd degree	218	50	54	85	22	22
3rd degree	44	7	16	12	5	4
Anterior arches	516	110	112	254	69	71
Nose						
Spur	81	23	9	32	6	3
Deviated septum	423	103	71	122	38	45
Hypertrophied	130	30	33	23	3	4
Atrophied	6	1	0	0	0	0
Other abnormalities	47	2	1	116	37	25
Adenoids, present	6	0	0	53	28	16
Tonsils,						
Absent	1008	190	205	342	96	132



Table III - Continued

	<u>MEN</u>			<u>WOMEN</u>		
	<u>Urban</u>	<u>Rural</u>	<u>Out-St.</u>	<u>Urban</u>	<u>Rural</u>	<u>Out-St.</u>
Tonsils, Con't.						
Pathological	226	74	50	190	83	34
Tags	214	42	33	116	13	22
Other	6	0	0	3	1	0
Ears						
Cerumen	195	55	34	32	9	24
Drum retracted	46	7	7	2	0	0
Perforated	7	4	0	0	1	0
Eyes,						
Lids, abnormal	3	0	1	0	0	0
Refraction						
O. D. (right)	149	66	50	98	30	25
O. S. (left)	155	68	37	88	33	42
Both O. D. and O. S.	772	126	198	533	152	159
Corrected	379	46	86	185	63	99
Conjunctivitis	14	1	0	2	0	0
Muscles, abnormal	3	0	1	0	0	0
Pupils, abnormal	2	0	0	0	0	0
Missing	0	1	1	0	0	0



CIVIL SERVICE EXAMINATIONS



Table IV - Appendix

CIVIL SERVICE EXAMINATIONS

1930 - 1931

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Total number examined	147	3	150
Married	101	2	103
Widower	3	0	3
Single	30	1	31
Not specified	13	0	13
Age			
Average	64	1	65
Minimum	48	1	49
Maximum	35	1	36
Possible inherited diseases in parents:			
Tuberculosis			
Paternal	2	0	2
Maternal	1	0	1
Other	8	1	9
Cancer			
Paternal	3	0	3
Maternal	4	0	4
Other	3	2	5
Neurasthenia			
Paternal	0	1	1
Maternal	1	0	1
Other	0	0	0
Epilepsy			
Paternal	0	0	0
Maternal	1	0	1
Other	0	0	0
Gave no history of any of above diseases	0	1	1
Injuries sustained			
Head	4	0	4
Chest	8	0	8
Abdominal	3	0	3
Other	35	0	35
Operations undergone			
Head	19	0	19
Chest	1	0	1
Abdominal	16	0	16
Other	9	0	9
Vaccination scar (age)			
Under 10 years	39	1	40
10 to 20 years	48	0	48
20 years and over	51	0	51
Sleep			
Under 7 hours	4	0	4
7 to 9 hours	134	2	136
Over 9 hours	9	1	10

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Table IV- Continued

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Stimulants			
Tea	46	2	48
Coffee	119	2	121
Tobacco	104		104
None	12	1	13
Vaccinations			
Typhoid	27	0	27
Smallpox	125	1	126
Diseases had			
Amygdalitis	1	0	1
Appendicitis	13	2	15
Chickenpox	69	2	71
Constipation	1	1	2
Diphtheria	3	0	3
Dysentery	0	0	0
Gonorrhea	2	0	2
Influenza	51	1	52
Malaria	11	0	11
Measles	138	3	141
Mumps	113	3	116
Neurasthenia	1	0	1
Otitis media	0	1	1
Pleurisy	7	0	7
Pneumonia	23	0	23
Rheumatism	11	0	11
Rubella	9	1	10
Scarlet fever	11	1	12
Smallpox	12	0	12
Tuberculosis	0	0	0
Typhoid fever	14	1	15
Whooping cough	92	3	95
General Development			
Good	119	2	121
Fair	25	1	26
Excellent	0	0	0
Poor	2	0	2
Not specified	1	0	1
Nutrition			
Thin	18	0	18
Average	119	3	122
Obese	9	0	9
Not specified	1	0	1
Build			
Stocky	32	1	33
Medium	80	1	81
Slender	34	1	35
Not specified	1	0	1

Northampton, Mass., July 18, 1884.

Table IV - Continued

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Eyes			
Blue	63	1	64
Gray	26	0	26
Greenish	2	0	2
Hazel	13	2	15
Dark	1	0	1
Brown	41	0	41
Not specified	1	0	1
Hair			
Flaxen	6	0	6
Reddish	3	0	3
Light brown	28	0	28
Brown	70	1	71
Dark brown	18	1	19
Black	8	0	8
Gray	10	1	11
Not specified	4	0	4
Skin			
Acne	17	0	17
Dry	4	0	4
Moist	143	3	146
Vaccination (type of scar)			
Pitted	80	0	80
Keloidal	4	0	4
Smooth	30	1	31
Not specified	11	0	11
Over 15 mm.	77	1	78
Under 15 mm.	37	0	37
Thyroid, enlarged	4	0	4
Lymph nodes			
Cervical	10	0	10
Axillary	2	0	2
Inguinal	23	0	23
Epitrochlear	1	0	1
Chest, abnormal	6	0	6
Lungs, abnormal	3	0	3
Heart			
Irregular pulse	1	0	1
Murmur, systolic	7	0	7
Abdomen, relaxed	3	3	6
Testes			
Atrophied	1		1
Enlarged	0		0
Undescended	2		2
Hydrocele	0		0
Varicocele	0		0
Penis, circumcised	20		20



Table IV - Continued

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Urine			
Acid	119	2	121
Alkaline	26	1	27
Neutral	2	0	2
Not specified	0	0	0
Albumin	4	0	4
Sugar	2	0	2
Vertebral column			
Kyphosis	12	0	12
Lordosis	8	0	8
Scoliosis	8	0	8
Flat feet			
Long arches, abnormal	48	1	49
Anterior arches, flat	40	2	42
Nose			
Spur	6	0	6
Deviated septum	44	0	44
Chronic hypertrophy	8	0	8
Adenoids, present	0	0	0
Tonsils			
Absent	13	1	14
Pathological	8	0	8
Tags	3	0	3
Ears			
Cerumen	13	0	13
Drum retracted	3	0	3
Hearing abnormal	10	0	10
Eyes			
Refraction, O. D. only	20	3	23
Refraction, O. S. only	14	2	16
Conjunctivitis	0	0	0
Corrected with glasses	5	2	7
Color vision abnormal	2	0	2
Vision both eyes, abnormal	66	2	68
Wear glasses	27	2	29
Grade			
Excellent	0	0	0
Good	119	1	120
Fair	27	2	29
Poor	1	0	1

1871

UNIVERSITY HIGH SCHOOL



Table V - Appendix

UNIVERSITY HIGH SCHOOL

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Total number examined	81	72	153
Total number reexamined	37	0	37
Tuberculosis (family history)	3	4	7
Cancer (family history)	9	5	14
Nervous breakdown (family history)	9	8	17
Diabetes (family history)	3	5	8
Epilepsy (family history)	0	0	0
Insanity (family history)	0	2	2
Injuries			
Head	4	4	8
Chest	2	3	5
Abdomen	0	0	0
Other	25	8	33
Operations			
Head	77	38	115
Chest	0	0	0
Abdomen	4	0	4
Other	7	2	9
Sleep			
Under 7 hours	2	0	2
7 to 9 hours	65	55	120
Over 9 hours	14	17	31
Stimulants			
Tea	12	6	18
Coffee	25	12	37
Tobacco	24		24
Diseases had:			
Abscess	2	2	4
Appendicitis	1	2	3
Asthma	0	2	2
Boils	18	16	34
Bronchitis	5	13	18
Chickenpox	57	60	117
Chorea	0	0	0
Constipation	4	4	8
Diphtheria	6	2	8
Discharging ear	4	3	7
Dysentery	0	0	0
Erysipelas	1	0	1
Gonorrhea	0	0	0
Hemorrhoids	0	0	0
Hay fever	2	4	6
Headache	11	16	27



Table V - Continued

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Heat stroke	0	0	0
Infantile paralysis	0	1	1
Influenza	14	12	26
Jaundice	2	0	2
Malaria	2	0	2
Measles	61	58	119
German measles	15	26	41
Meningitis	0	1	1
Mumps	41	34	75
Nervous breakdown	0	0	0
Neuritis	0	2	2
Pleurisy	1	0	1
Pneumonia	10	2	12
Rheumatism	2	0	2
Scarlet fever	10	6	16
Sinusitis	1	1	2
Smallpox	7	1	8
Spinal disease	0	0	0
Syphilis	0	0	0
Sunstroke	0	0	0
Tonsillitis	15	16	31
Tuberculosis	0	0	0
Typhoid fever	2	0	2
Whooping cough	53	52	105
Glasses	25	20	45
Smallpox vaccination	74	58	132
Typhoid vaccination	28	7	35

Table VI - Appendix

SUMMARY OF PHYSICAL EXAMINATION RESULTS

UNIVERSITY HIGH SCHOOL

	<u>Men</u>	<u>Women</u>	<u>Total</u>
General Development			
Excellent	2	5	7
Good	57	46	103
Fair	21	21	42
Poor	1	0	1
Nutrition			
Thin	21	26	47
Average	56	42	98
Obese	4	4	8

1. The first part of the paper discusses the importance of the research and the objectives of the study. It highlights the need for a comprehensive understanding of the subject matter and the role of the researcher in this process.

2. The second part of the paper focuses on the methodology used in the study. It details the research design, data collection methods, and the analytical techniques employed to interpret the findings.

3. The third part of the paper presents the results of the study. It provides a detailed analysis of the data collected and discusses the implications of the findings for the field of study.

4. The final part of the paper concludes the study and offers suggestions for future research. It emphasizes the importance of continued exploration and the role of the researcher in advancing knowledge in the field.

Table VI - Continued

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Build			
Stocky	9	6	15
Medium	52	35	87
Slender	20	31	51
Eyes			
Blue	35	20	55
Gray	5	11	16
Greenish	3	12	15
Hazel	6	6	12
Brown	31	23	54
Dark	1	0	1
Hair			
Flaxen	4	5	9
Reddish	4	5	9
Light brown	14	28	42
Brown	33	10	43
Dark brown	19	19	38
Black	7	5	12
Skin			
Moist	80	56	136
Dry	1	16	17
Acne	33	14	47
Vaccination scar			
Pitted	55	33	88
Keloidal	1	2	3
Smooth	14	33	47
Under 15 mm.	30	46	76
Over 15 mm.	40	22	62
None	11	4	15
Teeth			
Cavities	31	18	49
Absent	41	12	53
Need cleaning	11	30	41
Diseased gums	3	9	12
No abnormality	25	27	52
Thyroid			
Enlarged	2	8	10
Evidence of toxicity	0	0	0
Lymph nodes			
Cervical	18	2	20
Axillary	13	0	13
Inguinal	28	0	28
Epitrochlear	5	0	5
Chest abnormal	0	0	0
Lungs abnormal	0	0	0
Heart			
Enlarged	0	0	0



Table VI - Continued

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Heart, Con't.			
Irregular pulse	0	1	1
Murmur			
Systolic	0	2	2
Unclassified	0	1	1
Abdomen			
Rigid	0	1	1
Relaxed	0	0	0
Hernia			
Present	0	1	1
Palpable			
Liver	0	0	0
Spleen	0	0	0
Kidney	0	0	0
Penis			
Circumcised	31		31
Testes			
Enlarged	0		0
Atrophy	0		0
Hydrocele	0		0
Varicocoele	7		7
Undescended	0		0
Menses			
Regular		38	38
Irregular		21	21
Pain, severe		6	6
slight		20	20
Urine			
Acid	63	59	122
Alkaline	16	12	28
Albumen	4	1	5
Sugar	0	1	1

11/10/1911

CASES ENCOUNTERED DURING THE YEAR



Table VII - Appendix

CASES ENCOUNTERED DURING THE YEAR

Abscess		
Alveolar (gum boil)	14	
Axilla	1	
Tonsillar	1	
Unclassified	<u>58</u>	74
Acidosis		4
Acne		96
Adenitis		
Cervical	14	
Inguinal	2	
Unclassified	<u>49</u>	65
Adenoma		1
Adenopathy		1
Adhesions		12
Albuminuria		83
Alopecia, areata		3
Amenorrhea		138
Anaphylaxis		9
Anemia		5
Angina, Vincent's		39
Ankylosis		4
Aphonia		2
Appendicitis		
Acute	45	
Chronic	34	
Unclassified	<u>99</u>	175
Arthritis		
Chronic	3	
Unclassified	<u>84</u>	87
Asthma		29
Astigmatism		39
Auto-intoxication		128
Balanitis		6
Blepharitis		11
Bromidrosis		13
Bronchitis		
Acute	2	
Chronic	2	
Unclassified	<u>495</u>	499
Bursitis		
Acute	1	
Chronic	5	
Unclassified	<u>53</u>	59



Table VII - Continued

Calculus		1
Callositas		103
Carbuncle		4
Caries of tooth		37
Catarrhal fever		
Acute	2	
Unclassified	<u>4</u>	
		6
Cellulitis		45
Ceruminosis		295
Chalazoin (Meibomian cyst)		3
Chancroid		1
Chickenpox (varicella)		5
Cholecystitis		2
Clavus (corn)		55
Colic		1
Colitis		97
Conjunctivitis		
Acute	10	
Unclassified	<u>225</u>	
		235
Constipation		210
Coryza		2776
Cough		56
Cramp		
Muscle, leg	4	
Occupational	<u>1</u>	
		5
Curvature of spine		
Lordosis	1	
Scoliosis	<u>14</u>	
		15
Cyst		
Sebaceous	10	
Unclassified	<u>60</u>	
		70
Dacryocystitis		1
Deafness		6
Dementia Praecox		1
Dermatitis		
Herpetiformis	1	
Medicamentosa	7	
Mycelial	155	
Papillaris	2	
Schanbergi	1	
Venenata	9	
Unclassified	<u>185</u>	
		360
Deviation, nasal septum		19



Table VII - Continued

Diabetes, insipidus		3
Diarrhea		80
Diphtheria		1
Dysmenorrhea		2038
Ecchymosis		4
Eczema		36
Edema		6
Enteritis		
Acute	25	
Unclassified	<u>109</u>	
		134
Enuresis		1
Epidymitis		10
Epistaxis		92
Erysipelas		1
Erythema		
Multiforme	1	
Unclassified	<u>8</u>	
		9
Ethmoiditis		2
Eustachitis		2
Exostosis		3
Exposures		719
Fainting (syncope)		23
Fatigue		240
Fissure		
Anus	7	
Skin	<u>14</u>	
		21
Fistula, unclassified		6
Flat foot (Pes Planus)		59
Folliculitis		10
Furunculosis (boil)		782
Ganglion		2
Gastritis		
Acute	168	
Chronic	<u>1</u>	
		169
Gastroenteritis		207
Gingivitis		33
Glossitis		1
Glycosuria		1
Goitre		11
Halitosis		4
Hay fever		17
Headache (cephalzia)		609
Heart block		1
Heart trouble		18
Heat stroke		3



Table VII - Continued

Hematoma		16
Hematuria		4
Hemolysis		1
Hemorrhage		17
Hemorrhoids		
External	1	
Unclassified	<u>71</u>	72
Hernia		
Inguinal	3	
Unclassified	<u>23</u>	26
Herpes		
Labiales	25	
Simplex	27	
Zoster (shingles)	<u>22</u>	74
Hiccough		6
Hordeolum (stye)		137
Hydrocele		
Vulva	1	
Unclassified	<u>6</u>	7
Hyperhidrosis		8
Hyperopia		14
Hypertension		8
Hypertrophy, turbinates		3
Hysteria		5
Ichthyosis		1
Impacted molar		36
Impetigo		
Contagiosa	32	
Unclassified	<u>32</u>	64
Indigestion		608
Infection, local		863
Inflammation		61
Influenza		329
Ingrowing nail		47
Insomnia		30
Intertrigo		2
Iritis		2
Jaundice		
Acute	2	
Unclassified	<u>4</u>	6
Keloid		1
Kidney stone		1

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Table VII - Continued

Laryngitis		
Acute	7	
Chronic	1	
Unclassified	<u>139</u>	147
Leukorrhea		2
Lichen		1
Lipoma, shoulder		2
Lumbago		25
Lymphadenitis		7
Malaise		5
Malaria		5
Malingering		1
Mastitis		1
Mastoiditis		3
Measles		6
Measles, German		2
Menorrhagia		23
Metatarsalgia		11
Metrorrhagia		26
Migraine		20
Miliaria		1
Mucocoele		1
Mumps (parotitis)		15
Myalgia		39
Mycetoma, foot		1
Mycosis		
Intestinalis	5	
Unclassified	<u>414</u>	419
Mydriasis		24
Myocarditis		3
Myopia		8
Myositis		
Acute	229	
Chronic	2	
Traumatic	<u>1</u>	232
Nausea		31
Neisserian infection		30
Nephritis		
Acute	4	
Chronic	1	
Unclassified	<u>4</u>	9
Neuralgia		
Face	3	
Intercostal	3	
Unclassified	<u>45</u>	51



Table VII - Continued

Neurasthonia		68
Neuritis		71
Neurosis		27
Nocturia		1
Obesity		22
Orchitis, acute		7
Osteoma		1
Osteomyelitis		4
Otalgia (earache)		31
Otitis media		
Acute	6	
Chronic	1	
Unclassified	<u>75</u>	
		82
Overwork		1
Paralysis		
Facial	1	
Infantile	1	
Unclassified	<u>1</u>	
		3
Paronychia (felon)		34
Pediculosis		
Corporia	5	
Pubis	<u>17</u>	
		22
Periostitis		
Acute	1	
Chronic	1	
Unclassified	<u>20</u>	
		22
Pharyngitis		
Acute	52	
Chronic	2	
Unclassified	<u>1456</u>	
		1510
Phimosis		5
Pityriasis, Rosca		11
Pleurisy		
Acute	63	
Fibrinous	<u>1</u>	
		64
Polypus, nasal		2
Pruritus		4
Psoriasis		8
Psychasthenia		2
Pterygium		1
Pyclitis		6
Pyorrhoea, alveolaris		8
Pyrosis		5
Pyuria		1



Table VII - Continued

Rheumatism		32
Rhinitis		
Acute	31	
Chronic	1	
Unclassified	<u>1294</u>	1326
Sarcoma		2
Scabies		41
Scarlet fever (scarlatina)		5
Sciatica		6
Seborrhea		6
Shock		1
Sinusitis		
Frontal	4	
Maxillary	3	
Sphenoidal	1	
Unclassified	<u>272</u>	280
Spasm		1
Spur		3
Stasis, intestinal		19
Stomatitis		
Cancerum oris	66	
Unclassified	<u>14</u>	80
Stricture		1
Synovitis, acute		10
Syphilis		3
Tachycardia		13
Tenosynovitis		27
Thrush		2
Thyroiditis		
Acute	5	
Chronic	<u>1</u>	6
Tinnitus		1
Tonsillitis		
Acute	16	
Chronic	5	
Unclassified	<u>308</u>	329
Toothache		54
Torticollis		43
Tracheitis		69
Trachoma		2
Trichophytosis or tinea		
Circinata	70	
Corporis	10	
Cruris	62	
Versicolor	3	
Unclassified (ringworm)	<u>294</u>	439



Table VII - Continued

Tuberculosis		
Pulmonary, chronic	1	
Unclassified	<u>2</u>	4
Tumor		26
Ulcer		
Rodent	1	
Unclassified	<u>75</u>	79
Urethritis		
Acute	7	
Chronic	<u>1</u>	8
Urticaria (hives)		67
Varicose veins		10
Verruca (wart)		480
Vertigo (dizziness)		7

POISONING AND BITES

Poisoning		
Chlorine	9	
Ivy	8	
Ptomaine	36	
Unclassified	<u>45</u>	98
Bites		10
Insect sting		24

INJURIES, WOUNDS, ETC.

Abrasions	
Ankle	1
Arm	18
Back	2
Buttocks	2
Chest wall	1
Elbow	8
Face	19
Finger	24
Foot	53
Forearm	1
Gun	1
Hand	24
Head	2



Table VII - Continued

Heel	18	
Knee	83	
Leg	35	
Nose	4	
Shoulder	3	
Skin	13	
Thigh	6	
Toe	35	
Unclassified	<u>113</u>	466
Avulsion, nail		2
Blister		495
Burn		
Arm	16	
Back	2	
Chemical	26	
Electrical	1	
Eye		
acid	1	
unclassified	6	
Face	9	
Finger	26	
Foot	4	
Hand	26	
Leg	5	
Mat burn	2	
Neck	2	
Sun burn	6	
Wrist	4	
Unclassified	<u>50</u>	186
Concussion		
Brain	8	
Unclassified	<u>6</u>	14
Contusion		
Arm	17	
Back	15	
Bone		
rib	19	
thorax	8	
Brain	1	
Buttocks	5	
Chest wall	6	
Collar bone	1	
External ear	33	
Eye	12	
Face	15	
Finger	106	

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Table VII - Continued

Contusion, Con't.

Foot	65
Hand	42
Heel	39
Joint	
ankle	22
elbow	13
hip	10
knee	63
wrist	9
Leg	64
Lip	8
Muscle	5
Neck	5
Scalp	7
Scrotum	1
Shoulder	33
Side	8
Spine	1
Testicle	6
Thigh	13
Toe	69
Unclassified	<u>104</u>

825

Dislocation

Cartilage	2
Clavicle	1
Finger	5
Hip	1
Knee	3
Shoulder	2
Unclassified	<u>1</u>

21

Foreign body

Ear	2
Eye	179
Finger	39
Hand	6
Throat	1
Unclassified	<u>19</u>

246

Fracture

Ankle joint	7
Clavicle, simple	2
Finger	18
Foot	2
Forearm, simple	1
Humerus	1
Leg, simple	1



Table VII - Continued

Metacarpal, simple	4	
unclassified	3	
Nasal septum	6	
Rib, simple	17	
Skull, simple	2	
Toe	6	
Unclassified	21	
Wrist joint, simple	<u>6</u>	97
Injured		
Ankle	7	
Elbow	2	
Eye	6	
Finger	20	
Foot	8	
Hand	8	
Knee	52	
Nose	5	
Rib	5	
Semi-lunar cartilage	2	
Shoulder	17	
Testicle	4	
Toe	12	
Vertebra	1	
Wrist	9	
Unclassified	<u>102</u>	260
Rupture, ligaments		1
Sprain		
Ankle	450	
Arm	7	
Back	99	
Elbow	23	
Finger	50	
Foot	95	
Hand	17	
Hip	15	
Intercostals	2	
Joint		
foot	25	
knee	167	
neck	7	
sacro-iliac	9	
unclassified	1	
Leg	9	
Shoulder	59	
Tendon	6	
Thorax	2	
Thumb	35	



Table VII - Continued

Sprain, Con't.

Toe	12
Wrist	74
Unclassified	<u>39</u>

1203

Strain

Eye, ligament	6
unclassified	232
Joint	
ankle	58
foot	40
knee	53
neck	2
sacro-iliac	6
shoulder	25
wrist	10
unclassified	38

Muscle

abdomen	2
arm	3
back	25
leg	6
thigh	3
thumb	11
unclassified	<u>174</u>

694

Wound

Abdominal wall	1
Arm, lacerated	9
punctured	2
incised	1
External ear, incised	1
unclassified	1
Eye, incised	1
lacerated	9
unclassified	1
Face, lacerated	19
unclassified	2
Finger, incised	21
lacerated	112
unclassified	8
Foot, incised	3
lacerated	16
unclassified	6
Hand, incised	10
lacerated	52
punctured	6
unclassified	1
Head, incised	6

For the purpose of the present study, the following data were collected:

1. The number of subjects who had been exposed to the radiation.

2. The number of subjects who had been exposed to the radiation.

3. The number of subjects who had been exposed to the radiation.

4. The number of subjects who had been exposed to the radiation.

Table VII - Continued

Wound, Con't.	
Joint, lacerated	3
Leg, incised	1
lacerated	11
Lips, lacerated	10
Neck, incised	1
Nose, lacerated	2
Scalp, incised	1
lacerated	16
punctured	1
unclassified	1
Toe, lacerated	4
Tongue, incised	10
lacerated	35
punctured	8
unclassified	1
Wrist, lacerated	3
Unclassified	12



## RECAPITULATION

RECAPITULATION

Table VIII - Appendix

RECAPITULATION

Coryza	2776
Dysmenorrhea	2088
Pharyngitis	1510
Rhinitis	1326
Sprains	1203
Infections	863
Contusions	825
Furunculosis (boils)	782
Strains	694
Headache	609
Indigestion	608
Bronchitis	499
Blisters	495
Verruca (wart)	480
Abrasions	466
Tinea (ringworm)	439
Mycosis	419
Wounds	408
Dermatitis	360
Tonsillitis	329
Influenza	329
Ceruminosis	295
Sinusitis	280
Injuries	260
Foreign body	246
Fatigue	240
Conjunctivitis	235
Myositis	232
Constipation	210
Gastro-enteritis	207
Burns	186
Appendicitis	178
Gastritis	169
Laryngitis	147
Amenorrhea	138
Hordeolum (stye)	137
Enteritis	134
Auto-intoxication	128
Callositas	103
Poisoning	98
Fractures	97
Colitis	97
Acne	96
Epistaxis	92
Arthritis	87
Albuminuria	83
Otitis media	82



Table VIII - Continued

Stomatitis	80
Diarrhea	80
Ulcer	79
Herpes	74
Hemorrhoids	72
Neuritis	71
Cyst	70
Tracheitis	69
Neurasthenia	68
Urticaria	67
Adenitis	65
Pleurisy	64
Impetigo	64
Inflammation	61
Pes Planus (flat foot)	59
Bursitis	59
Cough	56
Clavus	55
Toothache	54
Neuralgia	51
Ingrowing Nail	47
Cellulitis	45
Torticollis	43
Scabies	41
Vincent's Angina	39
Myalgia	39
Astigmatism	39
Caries of tooth	37
Impacted molar	36
Eczema	36
Paronychia (felon)	34
Gingivitis	33
Otalgia	31
Nausea	31
Neisserian infection	30
Insomnia	30
Asthma	29
Tenosynovitis	27
Neurosis	27
Tumor	26
Metrorrhagia	26
Hernia	26
Lumbago	25
Mydriasis	24
Insect sting	24
Fainting	23
Obesity	22
Periostitis	22
Pediculosis	22



Table VIII - Continued

Dislocations	21
Migraine	20
Stasis, intestinal	19
Deviation, nasal septum	19
Heart trouble	18
Hemorrhago	17
Hay fever	17
Hematoma	16
Mumps	15
Scoliosis	14
Hyperopia	14
Fissure, skin	14
Concussions	14
Tachycardia	13
Bromidrosis	13
Adhesions	12
Pityriasis	11
Metatarsalgia	11
Goitre	11
Blepharitis	11
Varicose veins	10
Synovitis	10
Folliculitis	10
Epidymitis	10
Bites	10

NINE CASES: Anaphylaxis, Erythema, Exposure:scarlet fever, Nephritis

EIGHT CASES: Hyperhidrosis, Hypertension, Myopia, Psoriasis, Pyorrhea, Urethritis

SEVEN CASES: Fissure:anus, Hydrocele, Lymphadenitis, Orchitis, Vertigo

SIX CASES: Balanitis, Catarrhal fever, Deafness, Edema, Fistula, Hiccough, Jaundice, Measles, Pyelitis, Sciatica, Seborrhea, Thyroiditis

FIVE CASES: Anemia, Chickpox, Cramp, Hysteria, Malaise, Malaria, Phimosis, Pyrosis, Scarlet fever

FOUR CASES: Acidosis, Ankylosis, Carbuncle, Ecchymosis, Halitosis, Hematuria, Osteomyelitis, Pruritus, Tuberculosis

THREE CASES: Alopecia, Chalazoin (Meibomian cyst), Diabetes, Exostosis, Heat stroke, Hyperturbines, Mastoiditis, Myocarditis, Paralysis, Spur, Syphilis

TWO CASES: Avulsion:nail, Cholecystitis, Ethmoiditis, Eustachitis, Exposure:tuberculosis, Ganglion, German measles, Intertrigo, Iritis, Leukorrhea, Lipoma, Polypus:nasal, Psychasthenia, Sarcoma, Thrush, Trachoma



Table VIII - Continued

ONE CASE: Adenoma, Adenopathy, Aphonia, Calculus, Colic, Chancroid, Dacryocystitis, Diphtheria, Emuresis, Erysipelas, Exposure: chickenpox, Glossitis, Glycosuria, Heart block, Hemolysis, Ichthyosis, Keloid, Kidney stone, Lichen, Lordosis, Malinger-  
ing, Mastitis, Miliaria, Mucocoele mouth, Mycetoma, Nocturia, Os-  
teoma, Overwork, Pterygium, ~~Pyrexia~~, Rupture: ligaments, Shock, Spasm, Stricture, Tinnitus.

The first part of the chapter discusses the importance of maintaining accurate records of all transactions. This includes not only sales and purchases but also returns and discounts. The second part of the chapter covers the various methods used to calculate the cost of goods sold, including the FIFO, LIFO, and weighted average methods. The third part of the chapter discusses the importance of reconciling the company's records with the bank statement and the tax authorities. The fourth part of the chapter covers the various methods used to calculate the ending inventory, including the FIFO, LIFO, and weighted average methods. The fifth part of the chapter discusses the importance of maintaining accurate records of all transactions, including sales and purchases, returns and discounts, and the cost of goods sold. The sixth part of the chapter covers the various methods used to calculate the cost of goods sold, including the FIFO, LIFO, and weighted average methods. The seventh part of the chapter discusses the importance of reconciling the company's records with the bank statement and the tax authorities. The eighth part of the chapter covers the various methods used to calculate the ending inventory, including the FIFO, LIFO, and weighted average methods. The ninth part of the chapter discusses the importance of maintaining accurate records of all transactions, including sales and purchases, returns and discounts, and the cost of goods sold. The tenth part of the chapter covers the various methods used to calculate the cost of goods sold, including the FIFO, LIFO, and weighted average methods.



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